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August 31, 2015

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VIA HAND DELIVERY

Bridget Bohac, Office of the Chief Clerk
Texas Commission on Environmental Quality
12100 Park 35 Circle, Building F, Room 1101
Austin, Texas 78753

Re: Docket No. 2015-1170-AIR
Applicant Navasota South Peakers Operating Company I LLC's Response to Hearing Requests Received by TCEQ regarding Application for Air Quality Permit No. 120973 and PSD-TX-1420

Dear Ms. Bohac:

Enclosed for filing in the referenced and numbered matter is the original and seven copies of Applicant Navasota South Peakers Operating Company I LLC's Response to Hearing Requests Received by TCEQ regarding Application for Air Quality Permit No. 120973 And PSD-TX-1420.

A copy of this Response is being served on the persons identified at the end of the Response by the method indicated. Also enclosed is one additional copy which we request be file-stamped and returned to the courier making this delivery.

Very truly yours,

James D. Braddock

Enclosures

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DOCKET NO. 2015-1170-AIR

APPLICATION OF NAVASOTA SOUTH PEAKERS OPERATING COMPANY I LLC FOR TCEQ AIR QUALITY PERMIT No. 120973 and PSD-TX-1420	§ § § § §	BEFORE THE TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

APPLICANT NAVASOTA SOUTH PEAKERS OPERATING COMPANY I LLC'S RESPONSE TO HEARING REQUESTS RECEIVED BY TCEQ REGARDING APPLICATION FOR AIR QUALITY PERMIT NO. 120973 AND PSD-TX-1420

TO THE COMMISSIONERS OF THE TCEQ:

NAVASOTA SOUTH PEAKERS OPERATING COMPANY I LLC ("Navasota") requests that the Texas Commission on Environmental Quality ("TCEQ") issue the referenced permit without a contested case hearing because, as discussed more fully below: (1) the application satisfies all requirements for permit issuance and the two timely filed hearing requests did not comply with applicable TCEQ regulations; (2) the hearing requesters' cursory comments did not identify relevant and material disputed issues of fact or law raised during the public comment period; and (3) the requesters did not demonstrate that they are affected persons under TCEQ rules -- conservatively predicted emission impacts on requesters' residences are in all instances less than 1/25th of the applicable ambient air quality standards and TCEQ's protective effects screening levels (ESLs).

Below, Navasota provides the procedural background for this matter, summarizes its position, and then discusses it. In that discussion, Navasota describes the proposed plant and its emissions, identifies and evaluates the requests for hearing, and provides its response to those requests.

I. PROCEDURAL BACKGROUND

On June 23, 2014, Navasota filed an application with the TCEQ for Air Quality Permit No. 120973 and PSD-TX-1420. The permit will authorize the construction of the Union Valley Energy Center, a natural gas-fired simple cycle peaking power generation plant located approximately 4 miles west of Nixon, Wilson County, Texas. The plant itself will be near the middle of a 30 acre tract of land on the east side of CR 475, approximately 1 mile south of the intersection of CR 475 and FM 1681.

The Executive Director declared the application administratively complete on July 3, 2014. Navasota published its Notice of Receipt of Application and Intent to Obtain an Air Quality Permit on July 16, 2014 in the Wilson County News, a newspaper of general circulation in the City of Nixon and Wilson County, Texas. Following completion of the Executive Director's technical review, Navasota published its Notice of Application and Preliminary Decision (to issue the permit) on February 11, 2015 in the Wilson County News. Notice of a Public Meeting was mailed to interested parties on February 18, 2015 and published in the Wilson County News on February 25, 2015. The Public Meeting was held on March 10, 2015. The Executive Director's Response to Public Comment was filed with the Chief Clerk on June 29, 2015.

On August 19, 2015, the TCEQ Chief Clerk issued notice that the Commissioners of the TCEQ would consider the application and any timely filed hearing requests at their September 23, 2015 meeting. The Chief Clerk's August 19, 2015 notice identified two persons who the Chief Clerk determined filed hearing requests: Mrs. Lornna Talley and Mrs. Patti Werley.

II. SUMMARY OF POSITION

A. Based upon the facts, none of the hearing requesters have demonstrated, nor can they demonstrate, that they have valid and approvable hearing requests.

1. The hearing requesters' will not be adversely affected nor affected in a manner different from the general public. Both live more than one mile from the proposed plant. The maximum predicted concentrations of emissions of all air contaminants from the proposed plant at the hearing requester's identified locations are less than 1/25th of applicable TCEQ regulatory standards and protective ESLs;

2. Both hearing requests primarily focus on issues (water usage and light pollution) not relevant to the air quality permit application;

3. Both hearing requesters' expressed concerns regarding air contaminants provide only a broad, general, and totally unsupported assertion of possible adverse effects to humans and wildlife. They did not identify which air pollutants were of concern and why they could cause adverse effects; and

4. Navasota's detailed and expert scientific analysis, performed in a manner consistent with commonly accepted, conservative practices, demonstrates that even the worst-case concentrations of emissions of any of the air contaminants from the plant will be protective of the health and environment.

B. Navasota's application for permit satisfies all requirements for approval, as evidenced by the Executive Director's preliminary decision and response to comments, and should be approved without a hearing.

III. DISCUSSION

A. The Proposed Plant and Its Emissions

Navasota is seeking permission to construct and operate a 543 MW natural gas-fired, simple cycle, electric generating plant. Electricity will be generated from three combustion turbine generators. The plant is designed to be operated as a peaking power plant. Peaking

power plants operate primarily during times when the electrical grid is experiencing high "peak" demand and to provide back-up generation in the event another facility trips off-line. The periods of highest electrical demand occur mostly during hot summer afternoons. As a peaking power plant, its units will be limited to 2,500 hours of operation per year. Peaking facilities such as the proposed Union Valley Energy Center support the continued and expanded use of clean, renewable electric generation. These units help maintain the integrity of the electrical grid by providing quick start-up capabilities and additional generation during periods of high demand. Peaking plants also complement the supply variability of renewable generation facilities such as wind and solar generation by quickly providing power when the wind or solar generation decreases. Furthermore, the addition of new highly efficient peaking units allow for the retirement of older, less efficient generating units.

As the application demonstrates and as the TCEQ's Executive Director's review confirms, emissions from the plant will comply with all applicable rules and regulations, including those pertaining to both emission controls and air quality impacts. The plant will meet or exceed the requirements of best available control technology ("BACT") for all air contaminants, including use of dry-low NOx combustors, advanced burner design, good combustion practices, and clean fuels. As discussed in this Response, the dispersion modeling shows that at the residences of the hearing requesters the worst case potential maximum expected concentrations of all air contaminants from the proposed plant are less than $1/25^{th}$ of applicable air quality standards and protective ESLs set by the Executive Director. All standards for permit issuance, including those unique to the Prevention of Significant Deterioration ("PSD") program, also are satisfied.

Attachment A, the affidavit of Thomas Pritcher, Navasota's environmental consultant, includes a table and maps of the projected concentrations of air emissions from the plant at the hearing requester's properties and a detailed explanation of the methodologies and conservative assumptions he used to develop those data. Attachment B, an affidavit from Dr. Thomas Dydek, a highly experienced toxicologist, explains, based on those data, that the requesters have not demonstrated, and do not have a basis to demonstrate, that emissions from the plant will have any effect on their health or welfare, let alone any adverse effect.

B. THE REQUESTS FOR HEARING

Under TCEQ rules, there were three public notices following which requests for a contested case hearing on the application could be filed. The first was following publication of the Notice of Receipt of Application and Intent to Obtain Permit. Mrs. Patti Werley[1] and Mrs. Lornna Talley filed their hearing requests after that notice. No other hearing requests were filed for this application.

C. STANDARDS FOR REQUESTS FOR HEARING

TCEQ Rule Section 55.20(d)[2] sets forth the requirements for the form of hearing requests and requires substantial compliance. For individuals, the request must include the name, address and daytime telephone number of the person making the request. The request must identify the person's justiciable interest affected by the application and include a specific written statement explaining the requester's location and the distance relative to the subject of the application, and how and why they believe they will be affected by the activity in a manner not common to

[1] Mrs. Werley subsequently sent an email to TCEQ stating: *"I would like to withdraw my intent to hire a lawyer to stop the Navasota Union Valley Energy Center. I still don't want this plant in my neighborhood and think it is very unnecessary but will not sue to stop it being built."* From prior conversation with Mrs. Werley, Navasota understood that she would withdraw her hearing request and we believe this email was her attempt to do so.

[2] All TCEQ Rules are in 30 Texas Administrative Code but will be cited in the Response simply by reference to the TCEQ Rule, Section number.

members of the general public. For an association, the request must identify one person by name, address, daytime telephone number, and, where possible, fax number, who shall be responsible for receiving all official communications and documents for the group.

There must be a specific request for a contested case hearing and the request must include any other information specified in the public notice of the application. The public notices of the application, which Navasota published, reiterated in bold-faced type, that "a hearing request must include: (1) your name, . . . mailing address, daytime phone number, and fax number, if any; (2) applicant's name and permit number; (3) the statement "I/we request a contested case hearing"; (4) a specific description of how you would be adversely affected by the application and air emissions from the facility in a way not common to members of the general public; (5) the location and distance of your property relative to the facility; and (6) a description of how you use the property which may be impacted by the facility."

1. Lornna Talley's Hearing Request

Mrs. Talley's hearing request was filed by electronic mail on August 6, 2014. Mrs. Talley's hearing request focuses primarily on the issue of water usage, which is not a relevant consideration in air quality permitting. She later states that air pollutants that will be a product of the plant are known to affect people with breathing disorders and that she has a 14 year old son that receives treatment for asthma who would be harmed by the air in his home if the plant is built. Mrs. Talley's comments are general in nature, fail to identify any specific air pollutant(s) that could cause the problems she speculates would occur (which is limited to problems for her son and not her), and provides no support of any kind for her position. Finally she did not identify the distance and direction from her property to the proposed plant.

2. Patti Werley's Hearing Request

Mrs. Werley submitted her hearing request by electronic mail on August 20, 2014. Her stated concerns focused on the amount of water the plant might use and concerns about light pollution. Neither interest is justiciable because neither is a legally relevant factor in air quality permitting. Mrs. Werley did identify concerns about "pollutants" but provided no further information regarding what pollutants she was discussing and whether they were air pollutants. Her concerns regarding pollutants were that they might harm native wildlife, including sandhill cranes, and "human inhabitants." In listing these concerns, she did not meet the regulatory requirement of providing a specific description of how she would be adversely affected by the application and air emissions from the facility in a way not common to the general public. Generalized statements of concern about wildlife and humans do not satisfy the requirement for demonstration that she is an affected person. She also expressed concern that her "children and grandchildren should be able to live and work here and enjoy the same quality of life that we have enjoyed . . . " This statement is in a paragraph that only discusses water usage; again, her concern here is not tied to air quality concerns. Mrs. Werley references concerns about children, several of whom she states have asthma, at a school where she identifies herself as principal and instructor. Again, these are not concerns regarding impacts of air quality on her and she provides no basis for the right to assert claims of school or the children at the school. Finally, she also failed to meet the requirement of identifying the distance from her property to the proposed Union Valley Energy Center.

Both hearing requesters failed to demonstrate that they are affected persons. Neither of them provided anything other than boilerplate statements that the types of contaminants that would be emitted from the proposed plant may cause harm. Neither of them offered any

information, let alone credible information, to support the position that the combustion of natural gas in the proposed plant, a combustion process that routinely occurs in numerous residences and commercial structures, could have any impact on their health and safety or the use of their property. The requesters have now had over one year to examine the application and over six months to examine the air quality analysis and draft permit. Yet they have offered TCEQ only unsupported general conclusions. By contrast, Navasota provides expert scientific analysis by experienced professionals that demonstrates that neither hearing requester will experience any adverse impacts from contaminants from the proposed plant.

Since neither hearing request meets the Rule 55.201(d) standards for requesting a contested case hearing, there is no basis for calling a hearing. The permit should be issued.

D. RESPONSE TO THE HEARING REQUESTS

Although, for the reasons stated above, we believe that there are no valid requests for a contested case hearing, we have set forth below a response to those requests identified by the Chief Clerk. This response demonstrates that even if those letters are considered to be valid requests for a hearing, they fail to meet the TCEQ standards for the granting of a hearing. Among other things, requesters offer no scientific evidence in support of any their general assertions that emissions from the plant will adversely affect them. They offer only broad generalizations that the air contaminants could have adverse effects, even though the air contaminants at issue are being generated by the combustion of natural gas, a process which occurs in residences and commercial establishments in addition to industrial processes such as the proposed power plant. The supporting documentation in the administrative record and included with this brief clearly demonstrates that emissions from the plant will not adversely

affect human health and the environment.[3] Further, scientific analysis, consistent with TCEQ rules and practices, leads to the conclusion that the hearing requesters have not demonstrated, nor can they demonstrate that they are affected persons. For all these reasons, both hearing requests should be denied, the Executive Director's response to comments should be adopted, and the requested permit should be issued.

1. Standards for Valid Contested Case Hearing Request

TCEQ Rules, Chapter 55, Subchapter F, provide the standards for contested case hearing requests. Those rules direct that the hearing request substantially comply with the following: give the name, address, daytime telephone number, and, where possible, fax number of the person who files the request; identify the requester's personal justiciable interest affected by the application showing why the requester is an "affected person" who may be adversely affected by the proposed facility or activity in a manner not common to members of the general public; request a contested case hearing; list all relevant and material disputed issues of fact that were raised during the comment period that are the basis of the hearing request; and provide any other information specified in the public notice of application.[4]

An "affected person" is "one who has a personal justiciable interest related to a legal right, duty, privilege, power, or economic interest affected by the application."[5] An interest

[3] Consistent with SB709 (Act of, May 13, 2015 84th Leg. R.S. S.B. 709) which has passed the Legislature and been signed by the Governor, but is not yet in effect, the administrative record further demonstrates, and there has been no controverting evidence presented, that a permit, if issued consistent with the draft permit, would protect human health and safety, the environment, and physical property.
[4] 30 TAC §55.201(d).
[5] 30 TAC §55.203(a).

common to the general public is not a personal justiciable interest.[6] The relevant factors in determining whether a person is affected include:[7]

(1) whether the interest claimed is one protected by the law under which the application will be considered;
(2) distance restriction or other limitations imposed by law on the affected interest;
(3) whether a reasonable relationship exists between the interest claimed and the activity regulated;
(4) likely impact of the regulated activity on the health, safety, and use of property of the person;
(5) likely impact of the regulated activity on use of the impacted natural resource by the person; and
(6) for governmental entities; their statutory authority over or interest in the issues relevant to the application.

For an association, TCEQ rules specify additional standing requirements:[8]

(1) one or more members of the group or association would otherwise have standing to request a hearing in their own right;
(2) the interests the group or association seeks to protect are germane to the organization's purpose; and
(3) neither the claim asserted nor the relief requested requires the participation of the individual members in the case.

Under the pertinent rules, the Commission is to grant an affected person's timely filed hearing request if: (1) the request is made pursuant to a right to hearing authorized by law; and (2) the request raises disputed issues of fact that were raised during the comment period and that are relevant and material to the commission's decision on the application.[9] Recent case law has construed the TCEQ's authority and responsibility in determining whether a requester is an affected person. The relevant holdings from that case law support Navasota's position.

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[6] *Id.*
[7] 30 TAC §55.203(c).
[8] 30 TAC 55.205(a).
[9] 30 TAC § 55.211(c) (2).

In *Sierra Club v. Texas Commission on Environmental Quality and Waste Control Specialists* (*Sierra Club*),[10] the court reviewed a TCEQ determination of affected person under the wording of TCEQ Rule, Section 55.256, which applies to certain other TCEQ permitting programs, but is substantively identical to the wording in TCEQ Rule, Section 55.203, which applies to the Commissioner's consideration of this permit application. In its opinion, the court confirmed that the TCEQ:

> enjoys the discretion to weigh and resolve matters that may go to the merits of the underlying application, including the likely impact the regulated activity . . . will have on the health, safety, and use of property by the hearing requester . . . *See* 30 Tex. Admin. Code 55.256(c); *City of Waco* S.W. 3d at 420-21 (describing these evidentiary items as relevant to inquiry and holding that there was evidence in record to support TCEQ's determination).[11]

The *Sierra Club* court also identified the types of information the TCEQ may consider in making its determination of whether a person is an "affected person": "TCEQ's inquiry . . . may include reference to the permit application, attached expert reports, the analysis and opinions of professionals on its staff and any reports, opinions, and data it has before it."[12] In *Sierra Club*, TCEQ relied upon modeling and the court specifically referenced that modeling as a basis for upholding the TCEQ's decision not to grant the hearing requests. The Sierra Club opinion clearly provides that contested case hearing requests should be subject to "deeper inquiry, especially into any matters that go to the underlying merit of the license."[13] Further, TCEQ may evaluate and resolve factual disputes regarding issues associated with the contested case hearing request and rely upon expert reports and opinions and data in that evaluation.

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10. *Sierra Club v. Texas Commission on Environmental Quality and Waste Control Specialists* 455 S.W.3d 214 (Tex. App. 2014) *pet. filed.*
11 *Id* at 223-24.
12 *Id at 224.*
13 *Id at 221.*

In *TCEQ v. City of Waco*[14] (the case cited in the *Sierra Club quotes above),* the Texas Supreme Court, in evaluating a decision by the TCEQ regarding whether a person was an "affected person," acknowledged the Court of Appeals' reasoning in that case that the constitutional principles regarding standing in litigation apply to the TCEQ's determination of "affected person." Applying those constitutional principles, to have standing, a person must: "establish a concrete and particularized injury in fact, not common to the general public, that is: (1) actual or imminent; (2) fairly traceable to the issuance of the permit as proposed; and (3) likely to be redressed by a favorable decision on its complaint."[15]

2. Standards for Responses to Hearing Requests

TCEQ Rule, Section 55.209(e), directs that responses to hearing requests address:

(1) whether the requester is an affected person;
(2) which issues raised in the hearing request are disputed;
(3) whether the dispute involves questions of fact or law;
(4) whether the issues were raised during the public comment period;
(5) whether the hearing request is based on issues raised solely in a public comment withdrawn by the commenter in writing by filing a withdrawal letter with the chief clerk prior to the filing of the Executive Director's response to Comment;
(6) whether the issues are relevant and material to the decision on the application; and
(7) a maximum expected duration for the contested case hearing.

3. Analysis of the Hearing Requests

a. The Hearing Requesters are Not Affected Persons

Both hearing requesters failed to satisfy the requirements of TCEQ rules, restated in the public notices which prompted their requests, to provide a specific, written statement on "how

[14] *TCEQ v. City of Waco* 413 S.W.3d 409 (Tex. 2013).
[15] *Id* at 420-421.

and why the requester believes he or she will be adversely affected by the proposed facility in a manner not common to members of the general public."

The personal justiciable interest standard is part of the definition of "affected person" and the burden is on requesters to demonstrate that they are an affected person. To have a personal justiciable interest, the requesters also must demonstrate that their interest is not common to the members of the general public, that a reasonable relationship exists between the interests claimed and the activity regulated, the likely impact of the regulated activity on their health and safety, and the likely impact of the regulated activity on use of the impacted natural resource.

The information in Attachment A, Mr. Pritcher's affidavit, identifies the distance from combustion turbines to the address listed for each hearing request. Based upon the information provided in the requests for hearing, Mrs. Werley's residence is 2.32 miles and Mrs. Talley's residence is 1.40 miles from the combustion turbines. TCEQ has considered a one mile distance as a factor in past evaluations of contested case hearing requests, but it is a guide and does not override a site specific review that focuses on the required determination - - whether the person's exposure to the air contaminants is sufficient to make them an affected person. A power plant, such as that proposed by Navasota, combusts fuel at high temperatures and the hot exhaust gases exit via stacks at an extremely hot temperature and rapid air flow rate. These factors result in better dispersion of the air contaminants, compared to other types of plants that do not have significant combustion processes. Accordingly, downwind concentrations, even within one mile of the emission point, can be very low, particularly when good controls, including clean fuel such as natural gas, is used. And, in this case, Navasota has analyzed the possible impacts of air contaminants from the plant at the properties identified in the hearing requests both of which are more than a mile from the plant. This analysis demonstrates that there would be no adverse

effects to health or property and that, in fact, predicted concentrations of all contaminants would be less than 1/25th of applicable standards and protective ESLs.

In Attachment A, Mr. Pritcher describes how he analyzed the results of computer dispersion modeling, using commonly accepted scientific techniques, to predict, based upon the emission rates in the draft permit, the worst case maximum concentrations of air contaminants that would occur at any point beyond the Navasota property boundaries and, specifically, at the location of the hearing requesters. The attachment also contains the results of modeling of air contaminants -- both NAAQS and significant toxic air contaminants that are addressed by TCEQ-established ESLs. As noted, the results of the modeling show that the maximum predicted concentrations are at least 25 times below the applicable regulatory standards and ESLs. As the Commissioners are aware, concentrations below an ESL should not have any adverse effect on human health or property, or other interests protected under the Texas Clean Air Act; concentrations above any ESLs would not necessarily have an adverse effect, but may be looked at more closely by the TCEQ to determine whether the permit may be approved. The concentrations here are a small fraction of applicable standards and ESLs and would not have an adverse effect or any other impact on the health or safety of the requesters or the uses of their properties, including animals and vegetation. Dr. Dydek's affidavit (Attachment B) provides further support, based upon his extensive experience and expertise that the emissions from the proposed plant will be far below the levels that could ever potentially cause adverse impacts, even to persons who might have preexisting conditions such as asthma.

The maximum expected concentrations of almost all of the air contaminants at the hearing requester's properties, as identified by Mr. Pritcher in Attachment A, are lower than the maximum expected concentrations for those same air contaminants set forth in the Applicant's

Response to Hearing Requests for Indeck Wharton, LLC's application for TCEQ Air Quality Permit Nos. 111724 and PSDTX 1374, TCEQ Docket No. 2014-0847-AIR[16]. Indeck also applied for a natural gas-fired peaking power plant, limited to 2,500 hours of operation per year, similar to Navasota's application. Indeck's application and the hearing requests it generated, were considered by the Commissioners at their January 21, 2015 meeting The Commissioners unanimously ruled that that hearing requests should be denied and the requested permit be issued. Navasota's application should receive the same treatment.

b. There are No Material or Relevant Issues Raised in the Hearing Requests

The requesters have failed to demonstrate that there is any disputed material or relevant factual issue. Both hearing requests are predominately focused on water usage, which is not relevant. They raised no disputes with the emissions in the draft permit, the modeling and predicted concentrations of those emissions, and Navasota and the Executive Director's conclusions that the emissions would comply with the Texas Clean Air Act requirements and all applicable air quality rules. The Act and the air quality rules require that emissions of air contaminants must not be injurious to or adversely affect human health or welfare, animal life, vegetation or property or interfere with the normal use and enjoyment of animal life, vegetation or property. Both the Executive Director and Navasota have concluded, following detailed and exhaustive scientific review, that those standards will be achieved. Neither requester asserted that their health, property, animals, or welfare would be negatively impacted by air contaminant emissions, and they did not provide any basis, let alone a scientific basis, for their assertions that wildlife or health of other persons would be adversely affected. They did not dispute any of the

[16] Navasota's modeled results for formaldehyde, one-hour NO_x, and the annual average of toluene and xylene are insignificantly greater than Indeck's corresponding modeling results.

information that Navasota provided, and that the Executive Director reviewed and approved, that directly contradicts their assertions. Accordingly, from the administrative record as a whole, none of the requesters' concerns rise to the level of a disputed issue of fact.

c. The Disputed Issues If a Hearing Is Called

The requesters have not identified how, or even asserted that, Navasota has failed to demonstrate that all of the standards for permit issuance will be met. They have not disputed the conclusions that the proposed control technology meets TCEQ requirements, that the draft permit accurately represents the emissions that would come from the plant, and that those emissions would comply with all applicable rules and regulations. Accordingly, none of those issues are appropriate for referral for a contested case hearing. Although Navasota disagrees that a contested case hearing should be granted, should TCEQ refer the application for hearing, the only possible relevant and material factual issue would be, for those requesters whom the Commissioners determine have valid and approvable hearing requests, whether the projected concentrations of those air contaminants identified in their hearing requests would be injurious to or adversely affect health or animal life, at the properties listed in those requests.

Given that any possible relevant and material issue of fact that could be referred for hearing is limited in scope, Navasota believes that the duration of the hearing should be no more than four months from the date the request for hearing is sent to the State Office of Administrative Hearings ("SOAH").

IV. CONCLUSION

TCEQ Rule, Section 55.209(e), identifies the elements that should be addressed in a response to a hearing request. For the reasons set forth in this response, there are no valid hearing requests in this matter. Assuming, however, for the sake of argument, that there are valid hearing requests, the hearing requests should be denied. In summary and responsive to the

subsections of TCEQ Rule, Section 55.209(e) that set forth the requirements for responses to hearing requests:

(1) Neither requester is an affected person;

(2) The requesters have not raised any disputed issue. Navasota's application generally demonstrates that emissions of all air contaminants would be in full compliance with all requirements of the Texas Clean Air Act, including the intent of that Act, and the applicable requirements of the TCEQ. Navasota's application and the documentation in this brief specifically demonstrates that neither requester will be adversely affected by emissions from the plant because even predicted worst case maximum concentrations at requester's residences are less than 1/25th of applicable standards and protective ESLs. The primary concern identified by both hearing requesters is water usage, an irrelevant concern. The requesters did not dispute, and provided no facts or basis for disputing, the conclusions of both the application and the Executive Director regarding the standards for permit issuance. Therefore, there are no disputed issues;

(3) Navasota agrees Ms. Werley's and Ms. Talley's comments were raised during the public comment periods. Navasota disagrees that either person's comments constitute "issues;"

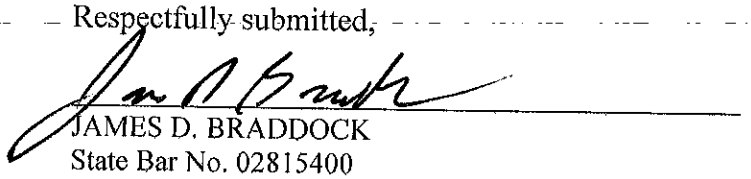
(4) There have been no comments withdrawn by the commenter in writing;

(5) To the extent that any requesters' comments rise to the level of issues, the only issue that is relevant and material is whether the projected maximum concentrations of those air contaminants as contained in the air quality analysis submitted by Navasota and in the Executive Director's preliminary decision, cited by those requesters whose hearing requests are granted, would adversely affect the health and welfare of people on the subject property; and

(6) If any of the requesters' comments are determined to comprise an issue, as set forth in item (5) above, it is an extremely limited issue.

Accordingly, although Navasota respectfully maintains that a contested case hearing is not warranted, should a hearing be called, the duration should be no longer than four months from the date of referral to SOAH.

Respectfully submitted,



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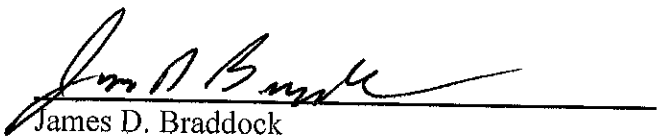
CERTIFICATE OF SERVICE

By my signature below, I certify that a copy of this response was served on the following individuals by the method indicated below, on August 31, 2015



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FOR PUBLIC INTEREST COUNSEL
Via hand-delivery
Vic McWherter, Public Interest Counsel
Texas Commission on Environmental Quality
P.O. Box 13087
Austin, Texas 78711-3087
Tel.: (512) 239-6363
Fax: (512) 239-6377

FOR ALTERNATIVE DISPUTE RESOLUTION
Via hand-delivery
Mr. Kyle Lucas
Texas Commission on Environmental Quality
Alternative Dispute Resolution, MC-222
P.O. Box 3087
Austin, Texas 78711-3087
Tel.: (512) 239-4010
Fax: (512) 239-4015

FOR THE CHIEF CLERK
Via hand-delivery
Bridget C. Bohac
Texas Commission on Environmental Quality
Office of Chief Clerk, MC-105
P.O. Box 13087
Austin, Texas 78711-3087
Tel.: (512) 239-3300
Fax: (512) 239-3311

REQUESTERS:
Via First Class Mail

Mrs. Lornna Talley
1497 County Road 476
Nixon, Texas 78140-4079

Mrs. Patti Werley
1285 County Road 477
Stockdale, Texas 78160-6731

ATTACHMENT A

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
AIR PERMIT NUMBER 120973 and PSD-TX-1420

STATE OF NORTH CAROLINA §
§
COUNTY OF WILSON §

AFFIDAVIT OF THOMAS O. PRITCHER, P.E.

BEFORE ME, the undersigned, a Notary Public in and for said county and state, on this day personally appeared Thomas O. Pritcher, who, being by me duly sworn upon his oath deposed and stated as follows:

My name is Thomas O. Pritcher. I am more than twenty-one (21) years of age, have never been convicted of a felony, and have personal knowledge of all facts stated in this Affidavit, which are true and correct.

I am a Senior Engineer III with Environmental Consulting & Technology, Inc. ("ECT"), a national environmental consulting firm. I am located in ECT's Raleigh, North Carolina office. I hold a Bachelor of Science (Agricultural Engineering) degree from Clemson University. I am a registered professional engineer in the State of North Carolina, the State of South Carolina and the State of Mississippi.

I have spent 22 years in the field of environmental consulting with an emphasis on air quality issues related to electrical generating facilities. My responsibilities have included preparing and supervising the preparation of air quality permit applications including calculation of emissions, determination of appropriate control technologies, dispersion modeling of emissions and determinations of compliance with air quality regulations.

I am familiar with and served as a lead for the project team that prepared Navasota South Peakers Operating Company I LLC's (Navasota's) Union Valley Energy Center (UVEC) application for Texas Commission on Environmental Quality (TCEQ) air quality permit Number 120973 and PSD-TX-1420.

This application is for a natural gas fired peaking power plant to be located near Nixon, Texas. The proposed plant's primary emission sources are three (3) natural gas-fired, simple-cycle combustion turbines.

Our project team's work on the UVEC application has included calculating expected emission rates and performing air dispersion modeling of emissions from the plant. An air dispersion model is used to estimate the ground level concentrations of air contaminants at varying distances from a source or sources of air contaminants. Information regarding the emission rates and location and parameters of the emission points, along with meteorological data, are inputs into the model, which then predicts the expected worst case concentrations of the air contaminants that might occur at specified receptors for specified time periods.

The modeling we performed on behalf of Navasota utilized the AERMOD model. This dispersion model is routinely used by the TCEQ and other regulatory agencies to provide a worst

case prediction of off property concentrations of air emissions from a plant. The AERMOD model is inherently conservative (i.e., tends to over-predict impacts when compared to actual monitored impacts) based on EPA design and has been proven to be conservative in model performance evaluations. One other area of conservatism relates to the assumption that a given emission unit is in operation at its maximum capacity during every hour of its authorized annual operating schedule. This assumption may be appropriate for certain types of facilities like manufacturing facilities that can operate at full capacity most of the time. However, in most cases, emissions are variable due to required load and, in the case of combustion turbines; changes in ambient temperature will create changes in emission rates. Thus, assuming a constant maximum emission value for each hour is overly conservative for facilities such as power plants that are not in operation all the time and that exhibit higher emission rates during very short periods of time (e.g., startup and shutdown). I, along with other ECT project team members, have extensive experience in using the AERMOD dispersion model.

The results of the dispersion modeling were submitted to the TCEQ in support of the UVEC application. The modeling report was reviewed and approved by the TCEQ modeling staff. Our project team's conclusions, agreed to by TCEQ's Executive Director, are the proposed project will not violate a National Air Quality Standard (NAAQS), cause an exceedance of the Prevention Significant Deterioration (PSD) increment, or have any adverse impacts on soils, vegetation, or Class I Areas.

In addition, the modeling predicted maximum ground level concentrations of other contaminants will be substantially below the levels set in TCEQ rules or the applicable Effects Screening Level ("ESL"). Concentrations below an ESL should not result in adverse health or welfare effects; concentrations above an ESL do not mean that adverse health or welfare effects would necessarily occur. Please note that our modeling is based upon the assumption that all three turbines would be emitting at their maximum levels at the same time, for all 2,500 hours per turbine of annual operation. It would be highly unlikely that this would occur.

I have supervised the preparation of a graphical depiction of the predicted concentration of certain air contaminants emitted from the plant at two (2) different residences/properties near the site. Our project team specifically modeled impacts at a geographic coordinate for the address requestors listed in their correspondence with the TCEQ regarding this application and relied upon aerial photography for the placement of the modeling receptor near the house associated with the property, or the center of the property if there were no known houses associated with it. The depiction is attached as Appendix A. The depiction demonstrates and further confirms information submitted to TCEQ in support of the application document that predicted maximum concentrations at the residences/properties of the requestors are well below the NAAQS or applicable ESL.

Based upon the analyses of receptors at the residences/properties, the predicted worst case concentrations requestors would be exposed to would be 1/25 (that is, 4% of) or less of pertinent air quality standards and ESL; requestors would not be exposed to concentrations of air contaminants that could adversely affect them or their property. The conservatism inherent in the AERMOD dispersion modeling analysis, as previously discussed, provides even greater support for these conclusions.

FURTHER AFFIANT SAYETH NOT.

Thomas O. Pritcher

Thomas O. Pritcher, P.E.

SUBSCRIBED AND SWORN TO BEFORE ME ON 8/29/, 2015.

Joshua M. Thomas

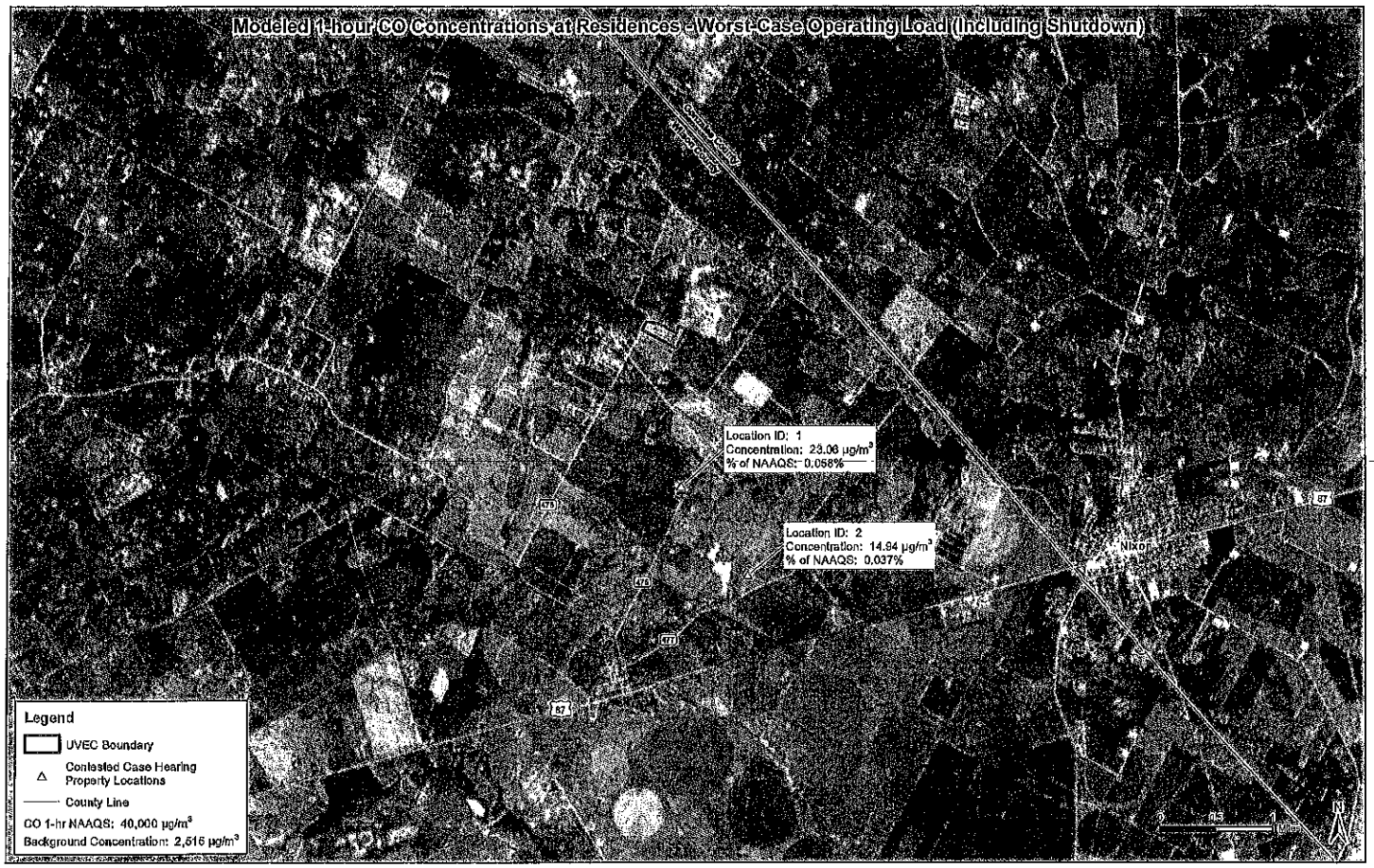
Notary Public Signature

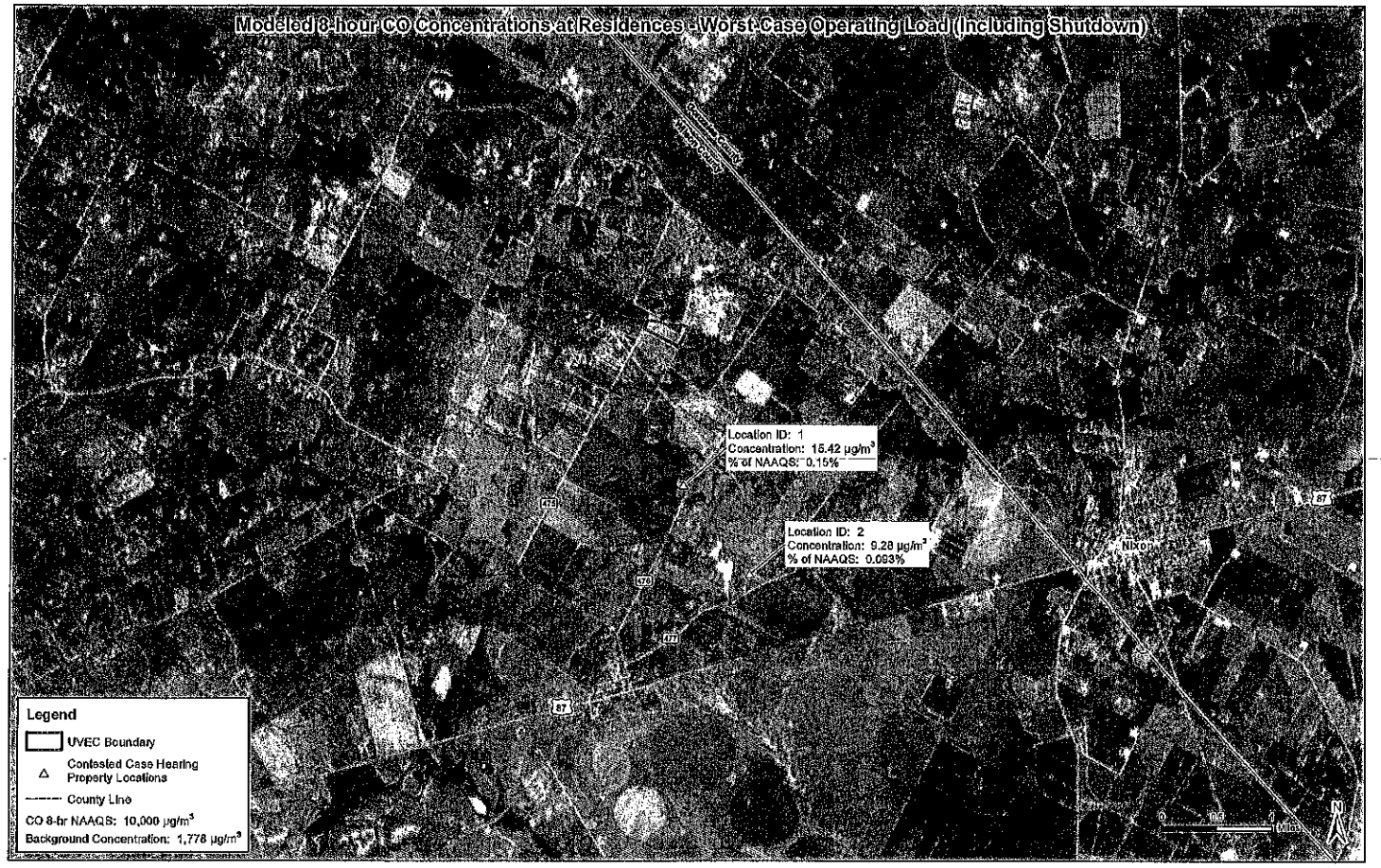
(PERSONALIZED SEAL)

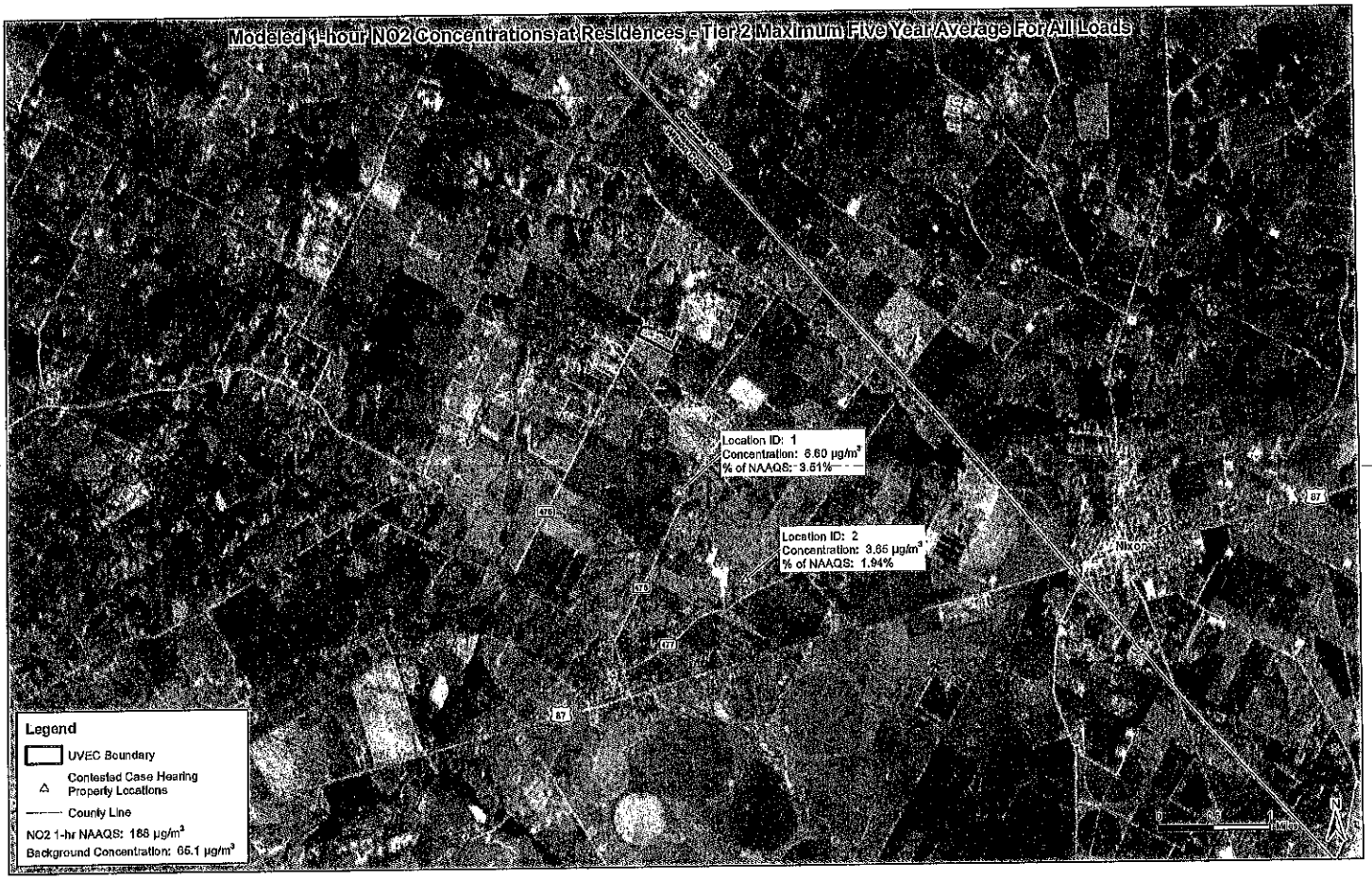
JOSHUA M. THOMAS
Notary Public
Wilson Co., North Carolina
My Commission Expires Nov. 11, 2016

Requesters Distance to Facility

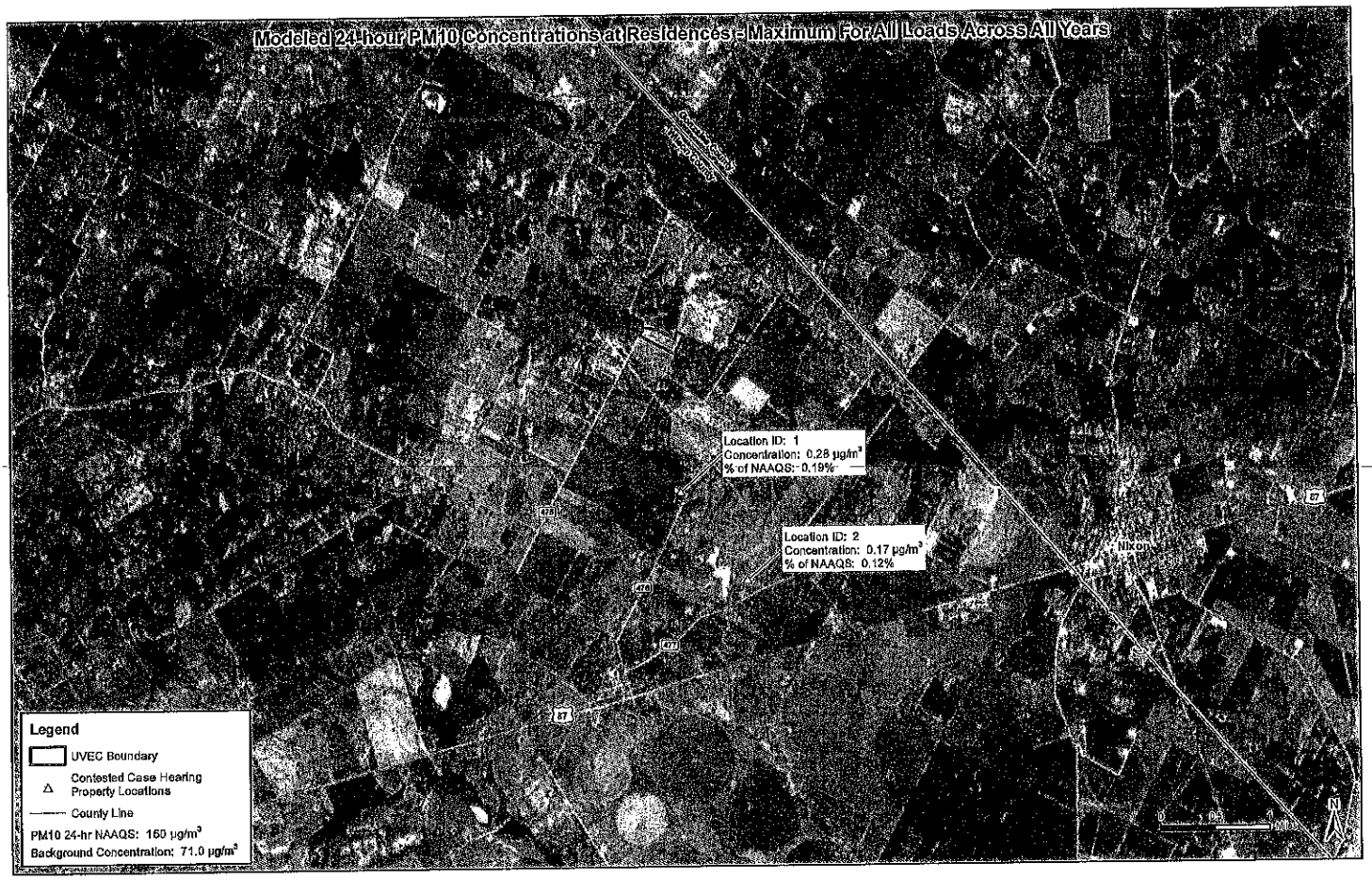
Map ID	Requesters Name	Address	Distance to Facility (miles)
1	Lornna Talley	1497 County Road 476, Nixon, TX 78140	1.40
2	Patti Werley	1285 County Road 477, Stockdale, TX 78160	2.32

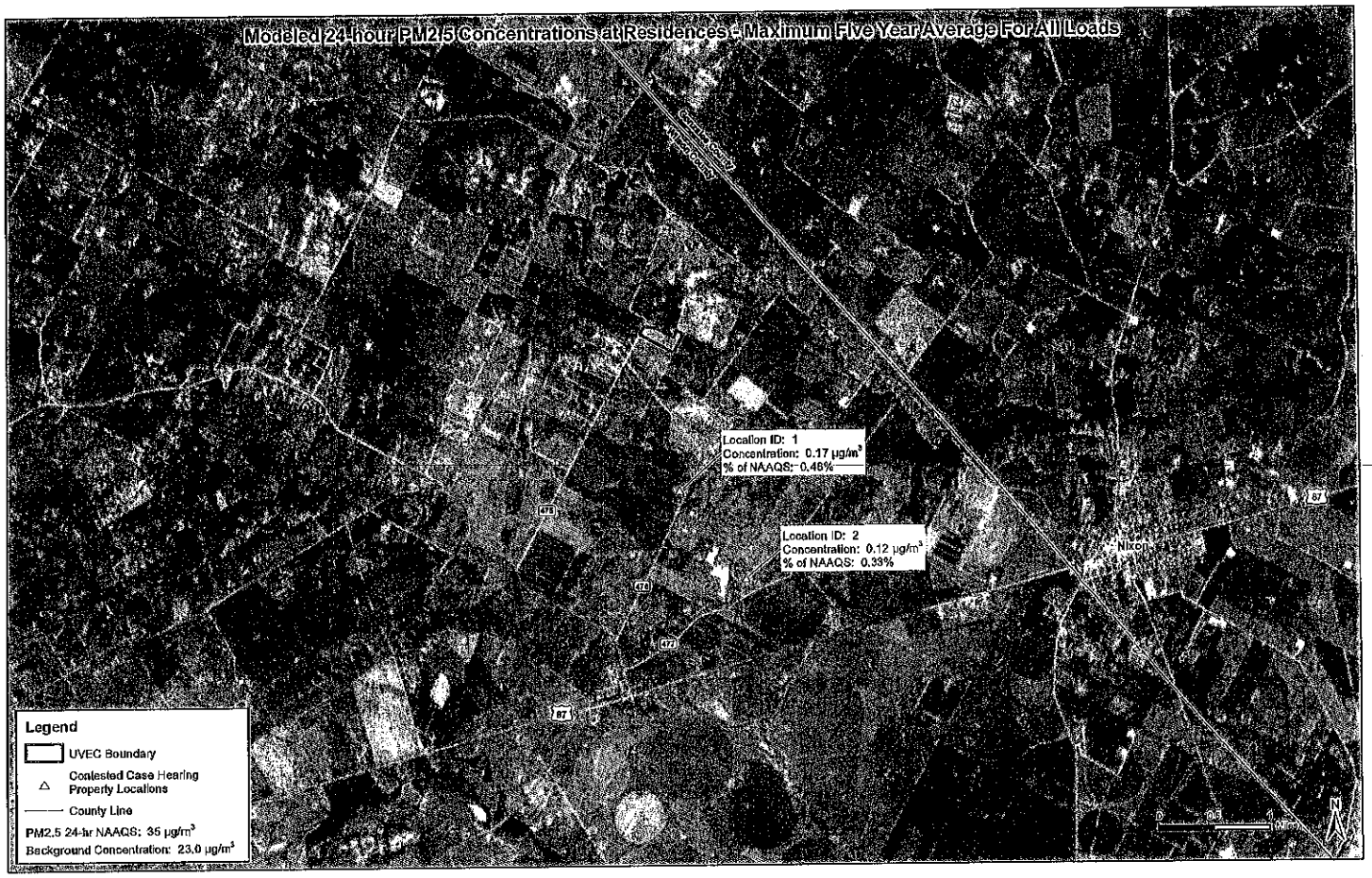

Modeled 1-hour CO Concentrations at Residences - Worst-Case Operating Load (Including Shutdown)
Location ID: 1
Concentration: 23.06 µg/m³
% of NAAQS: 0.058%
Location ID: 2
Concentration: 14.84 µg/m³
% of NAAQS: 0.037%
Nixon
Legend
UVEC Boundary
Contested Case Hearing Property Locations
County Line
CO 1-hr NAAQS: 40,000 µg/m³
Background Concentration: 2,516 µg/m³
N

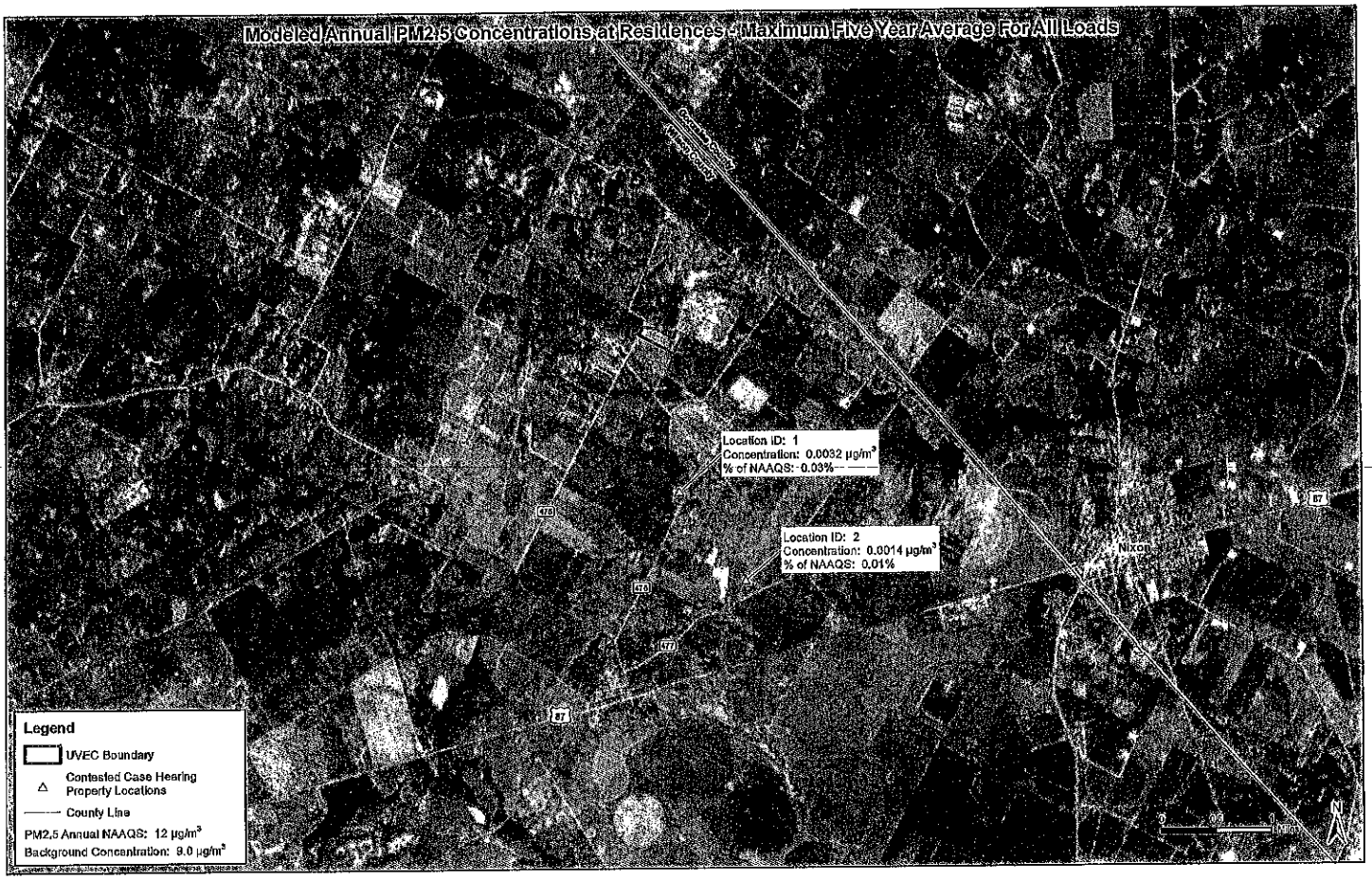

Modeled 8-hour CO Concentrations at Residences - Worst-Case Operating Load (Including Shutdown)
Location ID: 1
Concentration: 15.42 µg/m³
% of NAAQS: 0.15%
Location ID: 2
Concentration: 9.28 µg/m³
% of NAAQS: 0.093%
Nixon
Legend
UVEC Boundary
Contested Case Hearing Property Locations
County Line
CO 8-hr NAAQS: 10,000 µg/m³
Background Concentration: 1,778 µg/m³
0
1
Miles
N

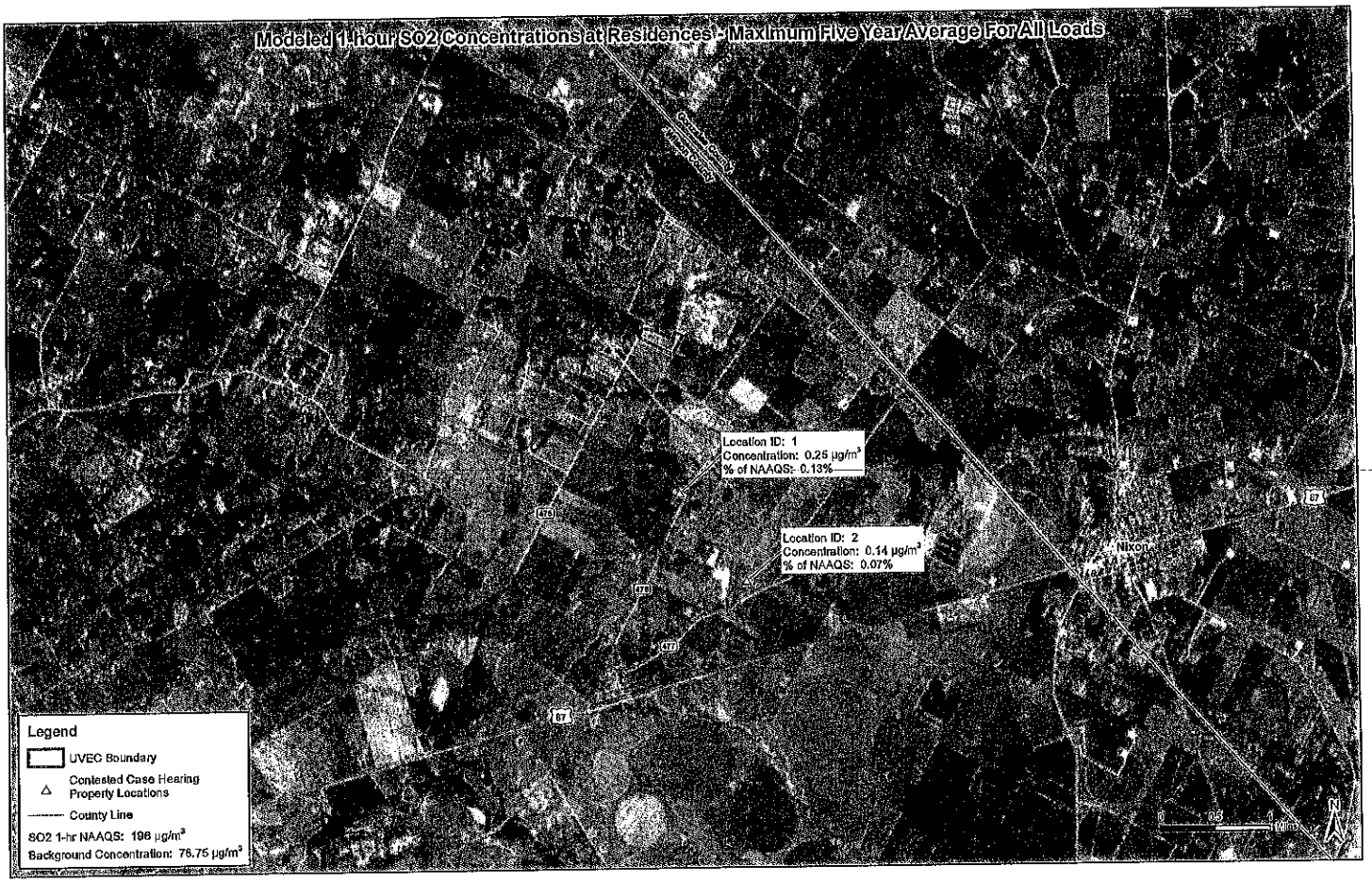

Modeled 1-hour NO2 Concentrations at Residences - Tier 2 Maximum Five Year Average For All Loads
Location ID: 1
Concentration: 8.60 µg/m³
% of NAAQS: 3.51%
Location ID: 2
Concentration: 3.85 µg/m³
% of NAAQS: 1.94%
Nixon
Legend
UVEC Boundary
Contested Case Hearing Property Locations
County Line
NO2 1-hr NAAQS: 188 µg/m³
Background Concentration: 65.1 µg/m³
N

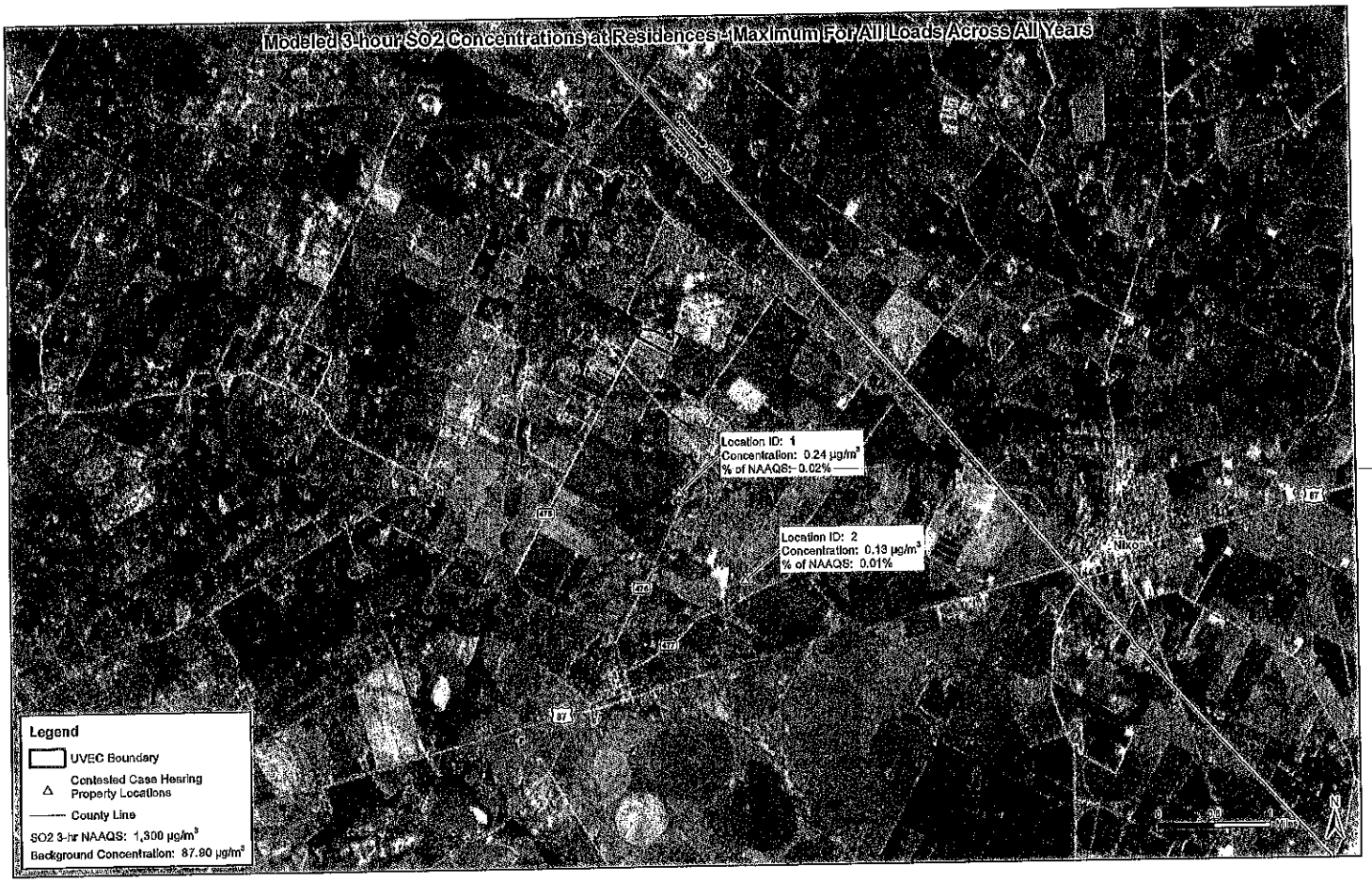

Modeled Annual NO2 Concentrations at Residences - Tier 2 Maximum For All Loads Across All Years
Location ID: 1
Concentration: 0.025 µg/m³
% of NAAQS: 0.026%
Location ID: 2
Concentration: 0.011 µg/m³
% of NAAQS: 0.011%
NIXON
Legend
UVEC Boundary
Contested Case Hearing Property Locations
County Line
NO2 Annual NAAQS: 100 µg/m³
Background Concentration: 6.08 µg/m³
0
0.5
1
M
N

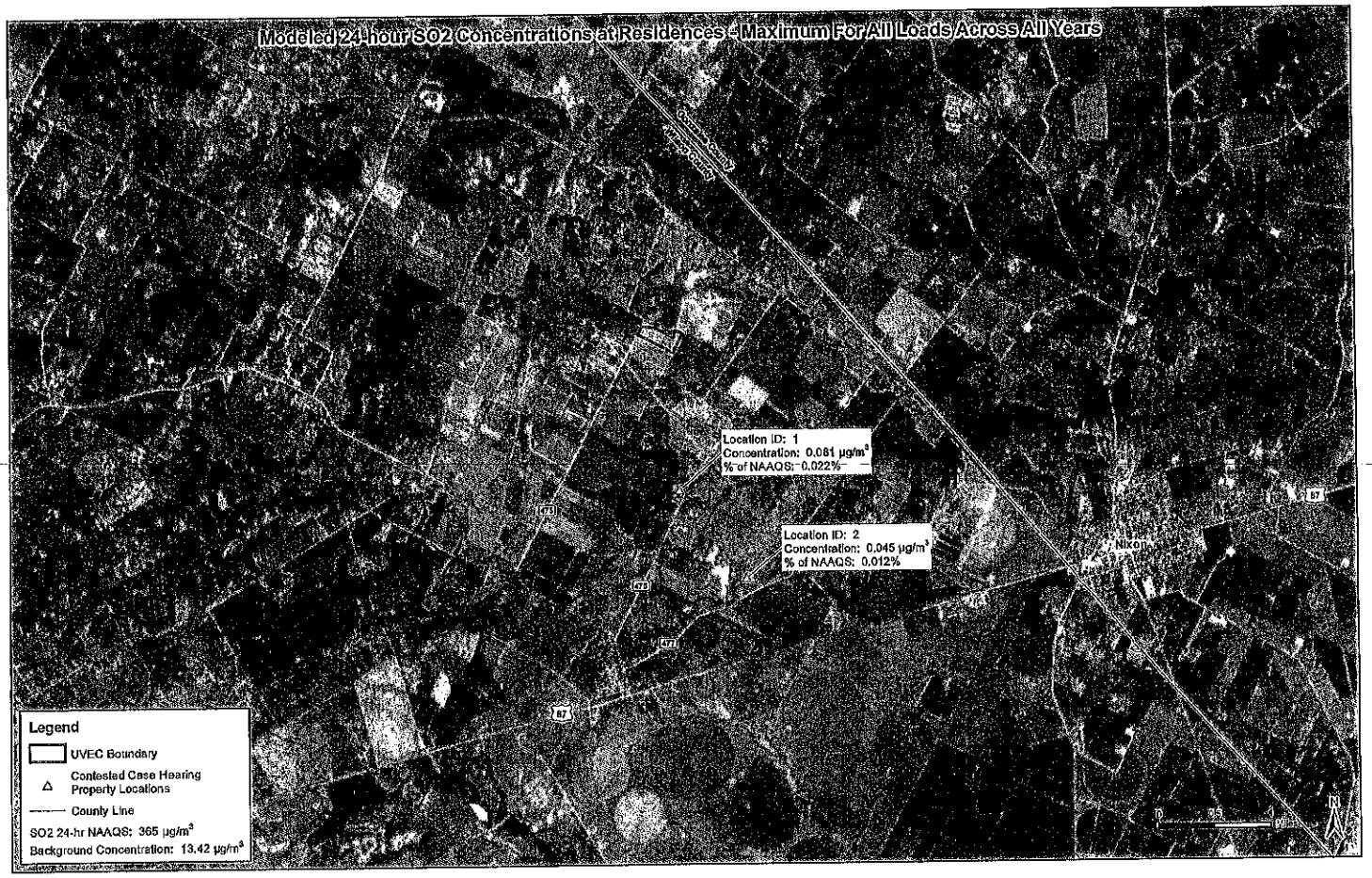

Modeled 24-hour PM10 Concentrations at Residences - Maximum For All Loads Across All Years
Location ID: 1
Concentration: 0.28 µg/m³
% of NAAQS: 0.19%
Location ID: 2
Concentration: 0.17 µg/m³
% of NAAQS: 0.12%
Nixon
Legend
UVEC Boundary
Contested Case Hearing Property Locations
County Line
PM10 24-hr NAAQS: 150 µg/m³
Background Concentration: 71.0 µg/m³
N


Modeled 24-hour PM2.5 Concentrations at Residences - Maximum Five Year Average For All Loads
Location ID: 1
Concentration: 0.17 µg/m³
% of NAAQS: 0.46%
Location ID: 2
Concentration: 0.12 µg/m³
% of NAAQS: 0.33%
Nixon
Legend
UVEC Boundary
Contested Case Hearing Property Locations
County Line
PM2.5 24-hr NAAQS: 35 µg/m³
Background Concentration: 23.0 µg/m³
N


Modeled Annual PM2.5 Concentrations at Residences - Maximum Five Year Average For All Loads
Location ID: 1
Concentration: 0.0032 µg/m³
% of NAAQS: 0.03%
Location ID: 2
Concentration: 0.0014 µg/m³
% of NAAQS: 0.01%
Nixon
Legend
UVEC Boundary
Contested Case Hearing Property Locations
County Line
PM2.5 Annual NAAQS: 12 µg/m³
Background Concentration: 9.0 µg/m³
N

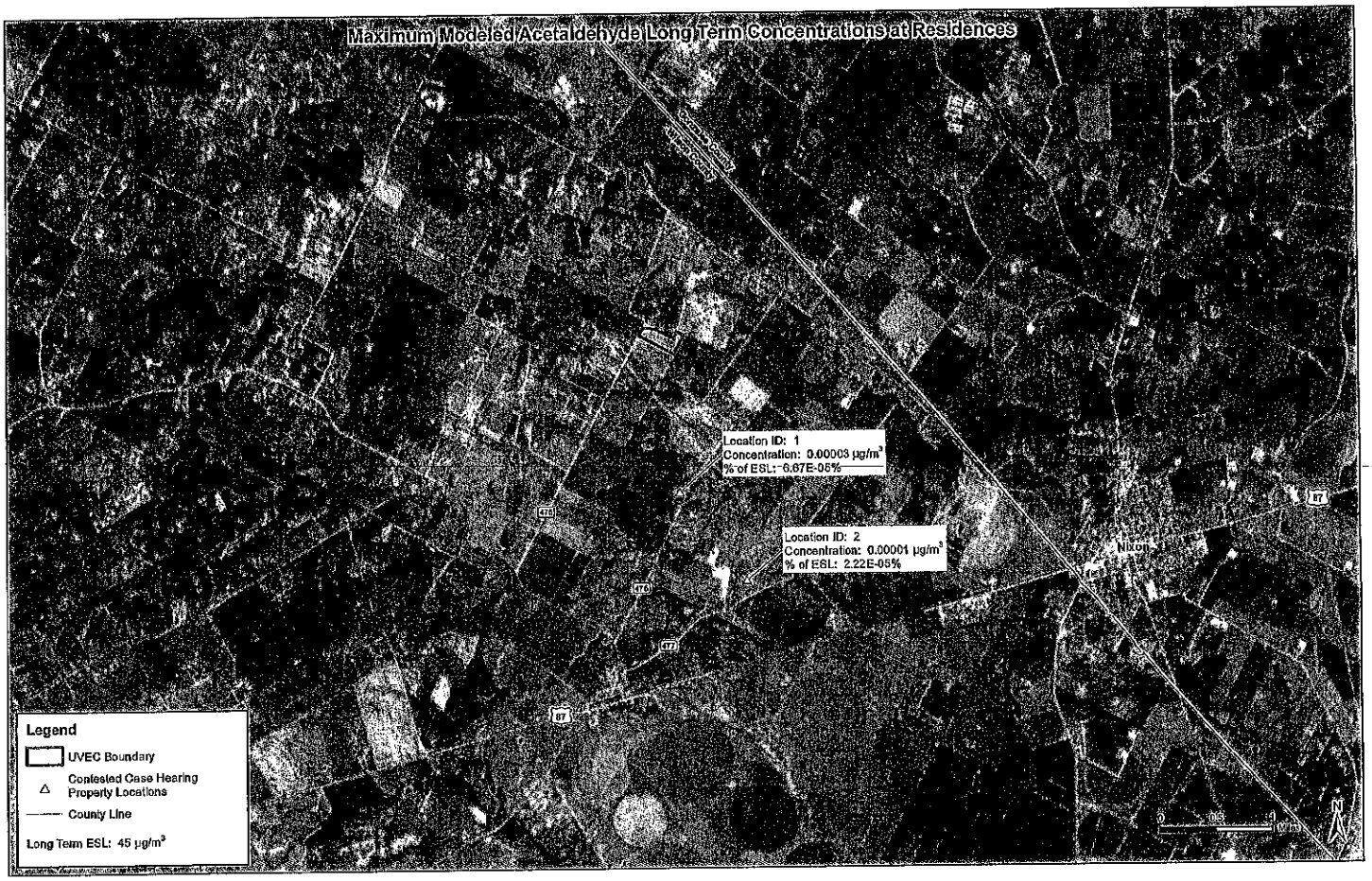

Modeled 1-hour SO2 Concentrations at Residences - Maximum Five Year Average For All Loads
Location ID: 1
Concentration: 0.26 µg/m³
% of NAAQS: 0.13%
Location ID: 2
Concentration: 0.14 µg/m³
% of NAAQS: 0.07%
Nixon
Legend
UVEC Boundary
Contested Case Hearing Property Locations
County Line
SO2 1-hr NAAQS: 196 µg/m³
Background Concentration: 76.75 µg/m³
N


Modeled 3-hour SO2 Concentrations at Residences - Maximum For All Loads Across All Years
Location ID: 1
Concentration: 0.24 µg/m³
% of NAAQS: 0.02%
Location ID: 2
Concentration: 0.13 µg/m³
% of NAAQS: 0.01%
Nixon
Legend
UVEC Boundary
Contested Case Hearing Property Locations
County Line
SO2 3-hr NAAQS: 1,300 µg/m³
Background Concentration: 87.80 µg/m³
N

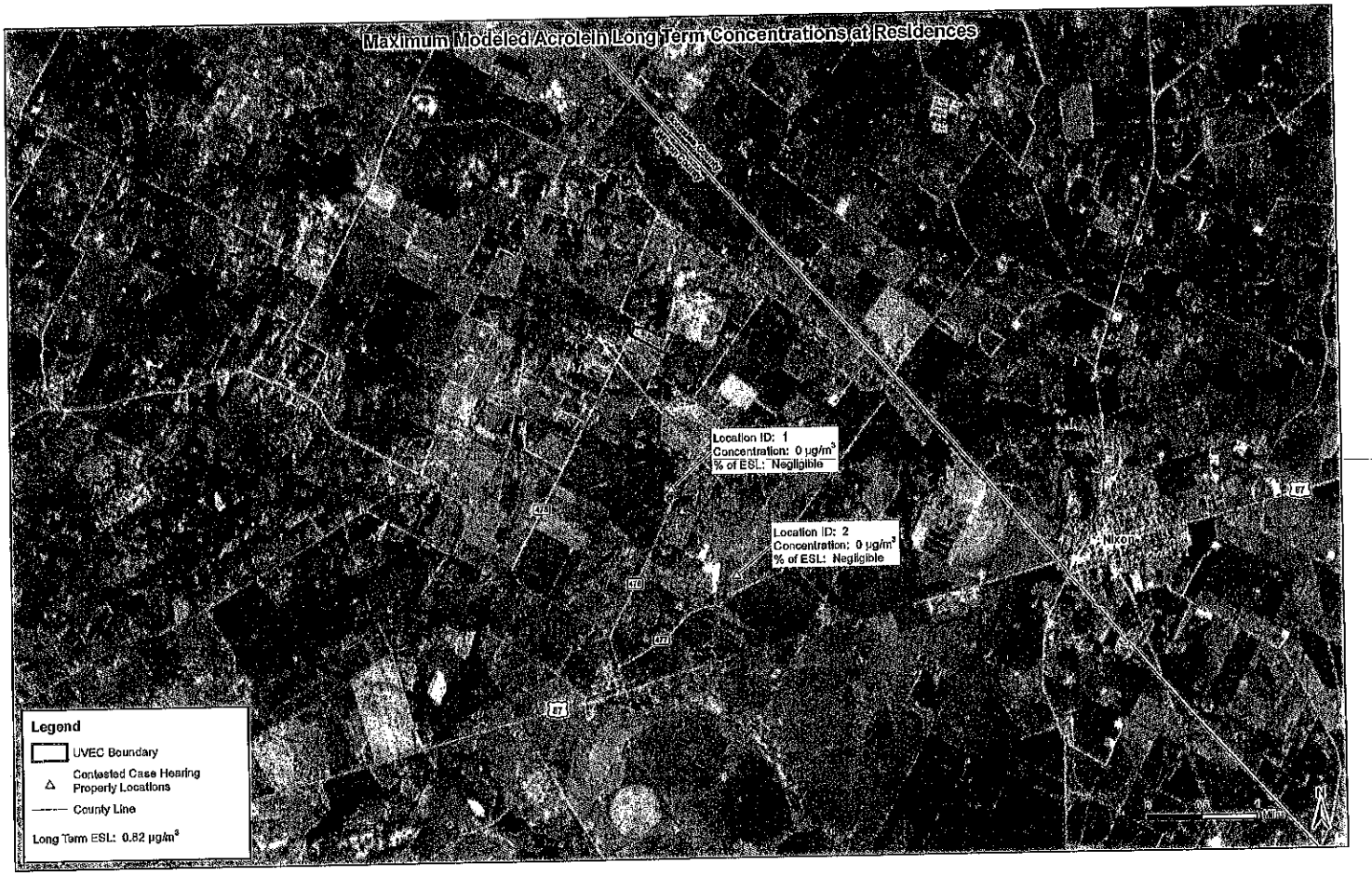

Modeled 24-hour SO2 Concentrations at Residences - Maximum For All Loads Across All Years
Location ID: 1
Concentration: 0.081 µg/m³
% of NAAQS: 0.022%
Location ID: 2
Concentration: 0.045 µg/m³
% of NAAQS: 0.012%
Nixon
Legend
UVEC Boundary
Contested Case Hearing Property Locations
County Line
SO2 24-hr NAAQS: 365 µg/m³
Background Concentration: 13.42 µg/m³
N


Maximum Modeled 1,3 Butadiene Long Term Concentrations at Residences
Location ID: 1
Concentration: 0 µg/m³
% of ESL: Negligible
Location ID: 2
Concentration: 0 µg/m³
% of ESL: Negligible
Legend
UVEC Boundary
Contested Case Hearing Property Locations
County Line
Long Term ESL: 8.9 µg/m³
N


Maximum Modeled 1,3 Butadiene Short Term Concentrations at Residences
Location ID: 1
Concentration: 0.00032 µg/m³
% of ESL: 6.27E-05%
Location ID: 2
Concentration: 0.00027 µg/m³
% of ESL: 5.29E-05%
Legend
UVEC Boundary
Contested Case Hearing Property Locations
County Line
Short Term ESL: 510 µg/m³
Nixon
0
1
N

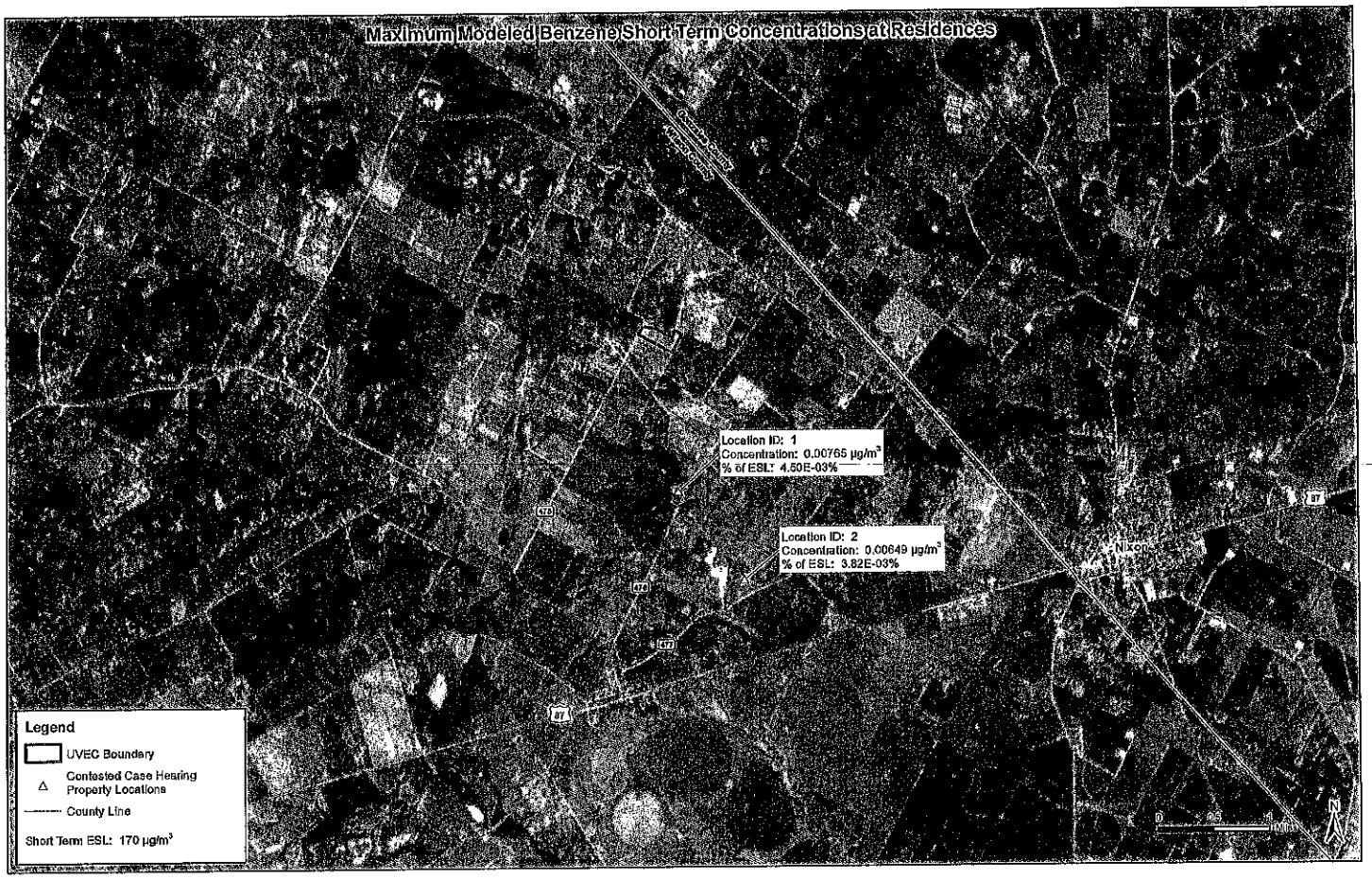

Maximum Modeled Acetaldehyde Long Term Concentrations at Residences
Location ID: 1
Concentration: 0.00003 µg/m³
% of ESL: 6.67E-05%
Location ID: 2
Concentration: 0.00001 µg/m³
% of ESL: 2.22E-05%
Nixon
Legend
UVEC Boundary
Contested Case Hearing Property Locations
County Line
Long Term ESL: 45 µg/m³
0
0.5
1 Mile
N

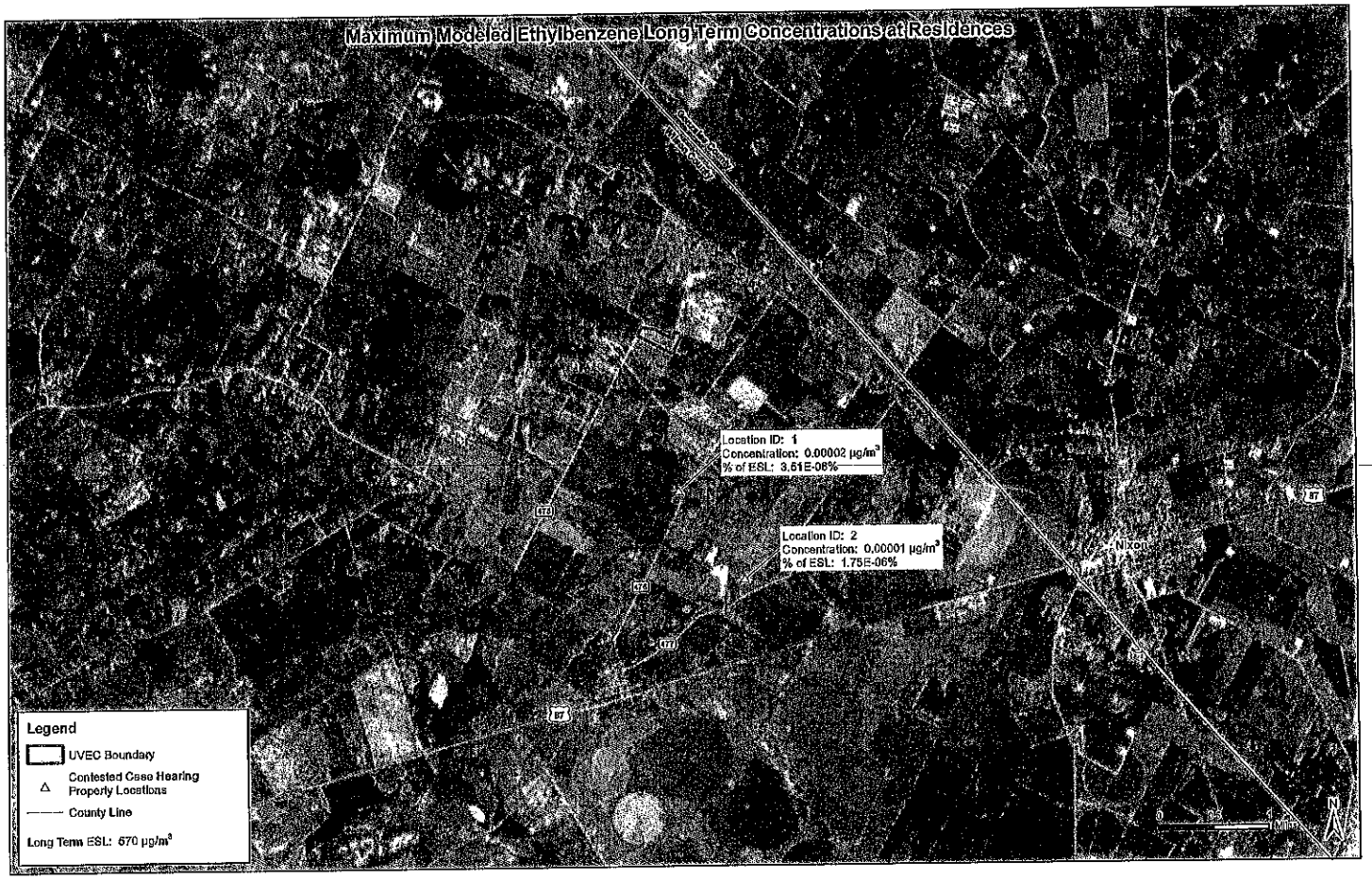

Maximum Modeled Acetaldehyde Short Term Concentrations at Residences
Location ID: 1
Concentration: 0.00726 µg/m³
% of ESL: 4.84E-02%
Location ID: 2
Concentration: 0.00544 µg/m³
% of ESL: 3.63E-02%
Legend
UVEC Boundary
Contested Case Hearing Property Locations
County Line
Short Term ESL: 15 µg/m³
Nixon
0
1
Miles
N


Maximum Modeled Acrolein Long Term Concentrations at Residences
Location ID: 1
Concentration: 0 µg/m³
% of ESL: Negligible
Location ID: 2
Concentration: 0 µg/m³
% of ESL: Negligible
NIXON
Legend
UVEC Boundary
Contested Case Hearing Property Locations
County Line
Long Term ESL: 0.82 µg/m³
0
0.5
1
Miles
N


Maximum Modeled Acrolein Short Term Concentrations at Residences
Location ID: 1
Concentration: 0.00118 µg/m³
% of ESL: 3.63E-02%
Location ID: 2
Concentration: 0.00073 µg/m³
% of ESL: 2.28E-02%
Nixon
Legend
UVEC Boundary
Contested Case Hearing Property Locations
County Line
Short Term ESL: 3.2 µg/m³
0
1
N


Maximum Modeled Benzene Long Term Concentrations at Residences
Location ID: 1
Concentration: 0.00001 µg/m³
% of ESL: 2.22E-04%
Location ID: 2
Concentration: 0.00001 µg/m³
% of ESL: 2.22E-04%
Nixon
Legend
UVEC Boundary
Contested Case Hearing Property Locations
County Line
Long Term ESL: 4.5 µg/m³
0
0.5
1
Miles
N


Maximum Modeled Benzene Short Term Concentrations at Residences
Location ID: 1
Concentration: 0.00765 µg/m³
% of ESL: 4.50E-03%
Location ID: 2
Concentration: 0.00649 µg/m³
% of ESL: 3.82E-03%
Nixon
Legend
UVEC Boundary
Contested Case Hearing Property Locations
County Line
Short Term ESL: 170 µg/m³
0
0.5
1
Miles
N


Maximum Modeled Ethylbenzene Long Term Concentrations at Residences
Location ID: 1
Concentration: 0.00002 µg/m³
% of ESL: 3.51E-06%
Location ID: 2
Concentration: 0.00001 µg/m³
% of ESL: 1.75E-06%
Nixon
Legend
UVEC Boundary
Contested Case Hearing Property Locations
County Line
Long Term ESL: 570 µg/m³
0
1
Miles
N


Maximum Modeled Ethylbenzene Short-Term Concentrations at Residences
Location ID: 1
Concentration: 0.00579 µg/m³
% of ESL: 7.82E-04%
Location ID: 2
Concentration: 0.00353 µg/m³
% of ESL: 4.77E-04%
Nixon
Legend
UVEC Boundary
Contested Case Hearing Property Locations
County Line
Short Term ESL: 740 µg/m³
N

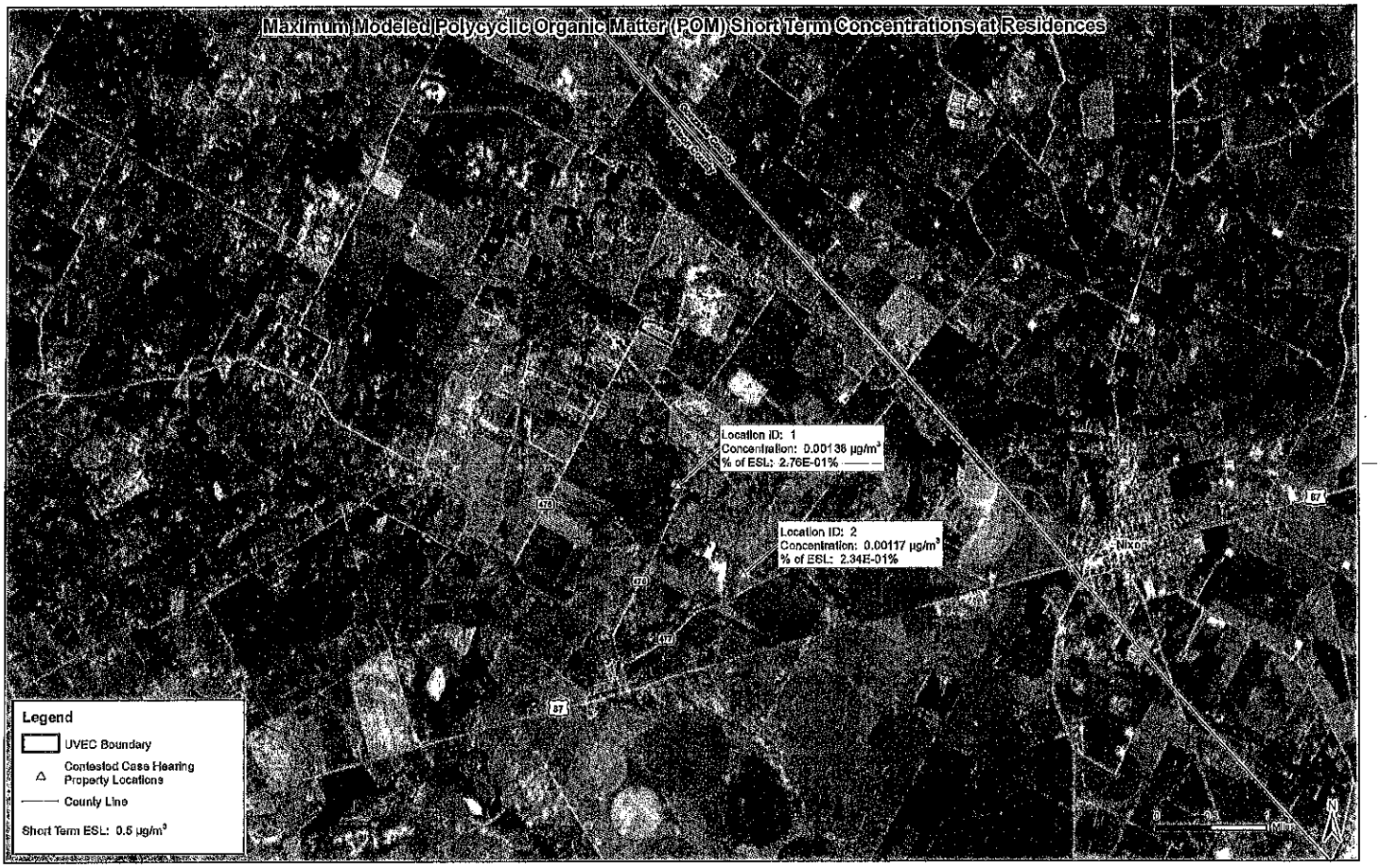

Maximum Modeled Formaldehyde Long Term Concentrations at Residences
Location ID: 1
Concentration: 0.00020 µg/m³
% of ESL: 6.06E-03%
Location ID: 2
Concentration: 0.00009 µg/m³
% of ESL: 2.73E-03%
Nikon
470
476
477
87
Legend
UVEC Boundary
Contested Case Hearing Property Locations
County Line
Long Term ESL: 3.3 µg/m³
0
0.5
1 Miles
N


Maximum Modeled Formaldehyde Short Term Concentrations at Residences
Location ID: 1
Concentration: 0.06432 µg/m³
% of ESL: 3.62E-01%
Location ID: 2
Concentration: 0.03941 µg/m³
% of ESL: 2.23E-01%
Nixon
475
470
471
87
Legend
UVEC Boundary
Contested Case Hearing Property Locations
County Line
Short Term ESL: 15 µg/m³
N


Maximum Modeled Naphthalene Long Term Concentrations at Residences
Location ID: 1
Concentration: 0 µg/m³
% of ESL: Negligible
Location ID: 2
Concentration: 0 µg/m³
% of ESL: Negligible
Nixon
Legend
UVEC Boundary
Contested Case Hearing Property Locations
County Line
Long Term ESL: 50 µg/m³
N


Maximum Modeled Naphthalene Short Term Concentrations at Residences
Location ID: 1
Concentration: 0.00106 µg/m³
% of ESL: 5.30E-04%
Location ID: 2
Concentration: 0.00090 µg/m³
% of ESL: 4.50E-04%
Nixon
Legend
UVEC Boundary
Contested Case Hearing Property Locations
County Line
Short Term ESL: 200 µg/m³
N

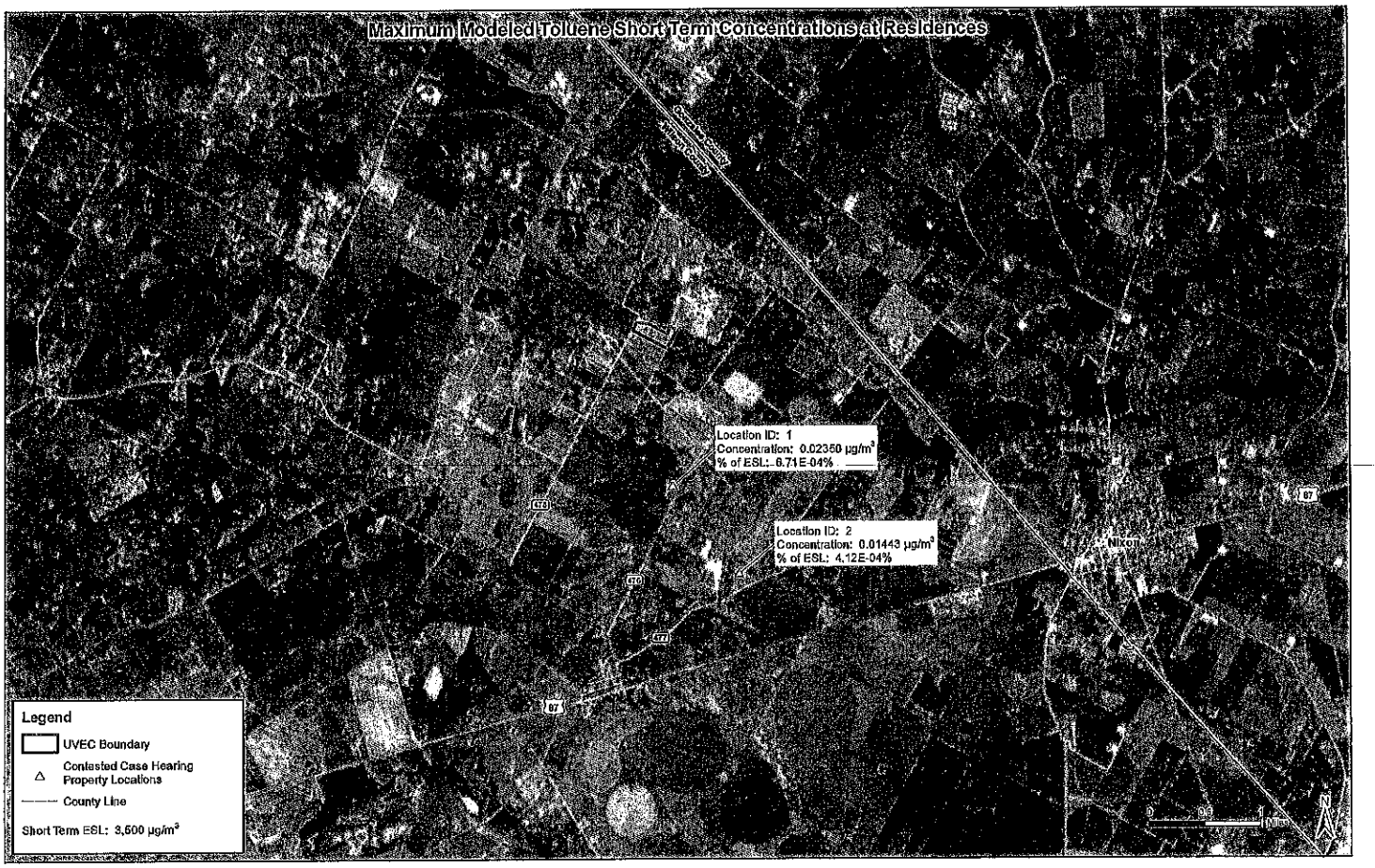

Maximum Modeled Polycyclic Organic Matter (POM) Long Term Concentrations at Residences
Location ID: 1
Concentration: 0 µg/m³
% of ESL: Negligible
Location ID: 2
Concentration: 0 µg/m³
% of ESL: Negligible
Nixon
Legend
UVEC Boundary
Contested Case Hearing Property Locations
County Line
Long Term ESL: 0.05 µg/m³
0
0.5
1
Miles
N

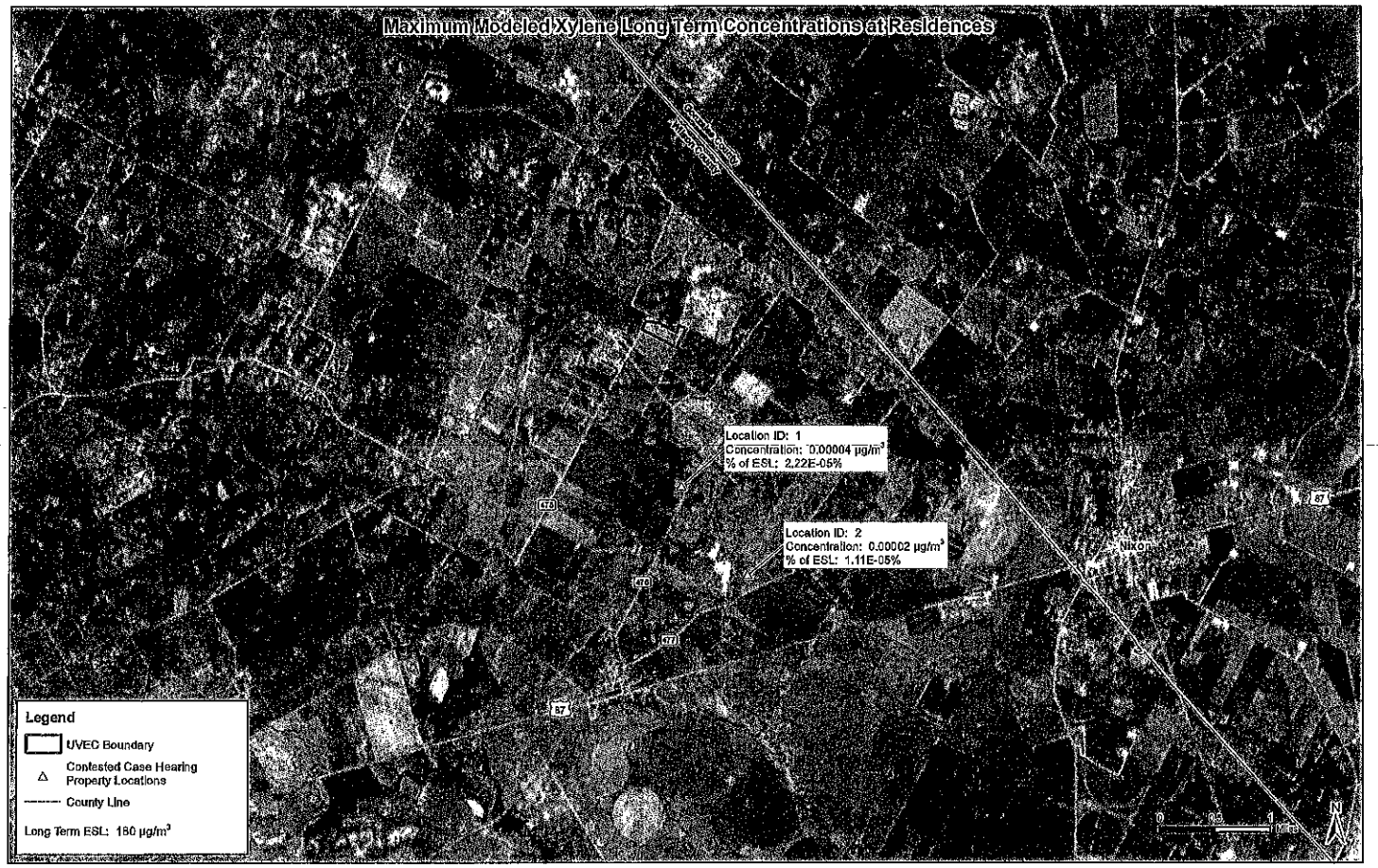

Maximum Modeled Polycyclic Organic Matter (POM) Short Term Concentrations at Residences
Location ID: 1
Concentration: 0.00136 µg/m³
% of ESL: 2.76E-01%
Location ID: 2
Concentration: 0.00117 µg/m³
% of ESL: 2.34E-01%
Nixon
Legend
UVEC Boundary
Contested Case Hearing Property Locations
County Line
Short Term ESL: 0.5 µg/m³
0
0.5
1
Miles
N

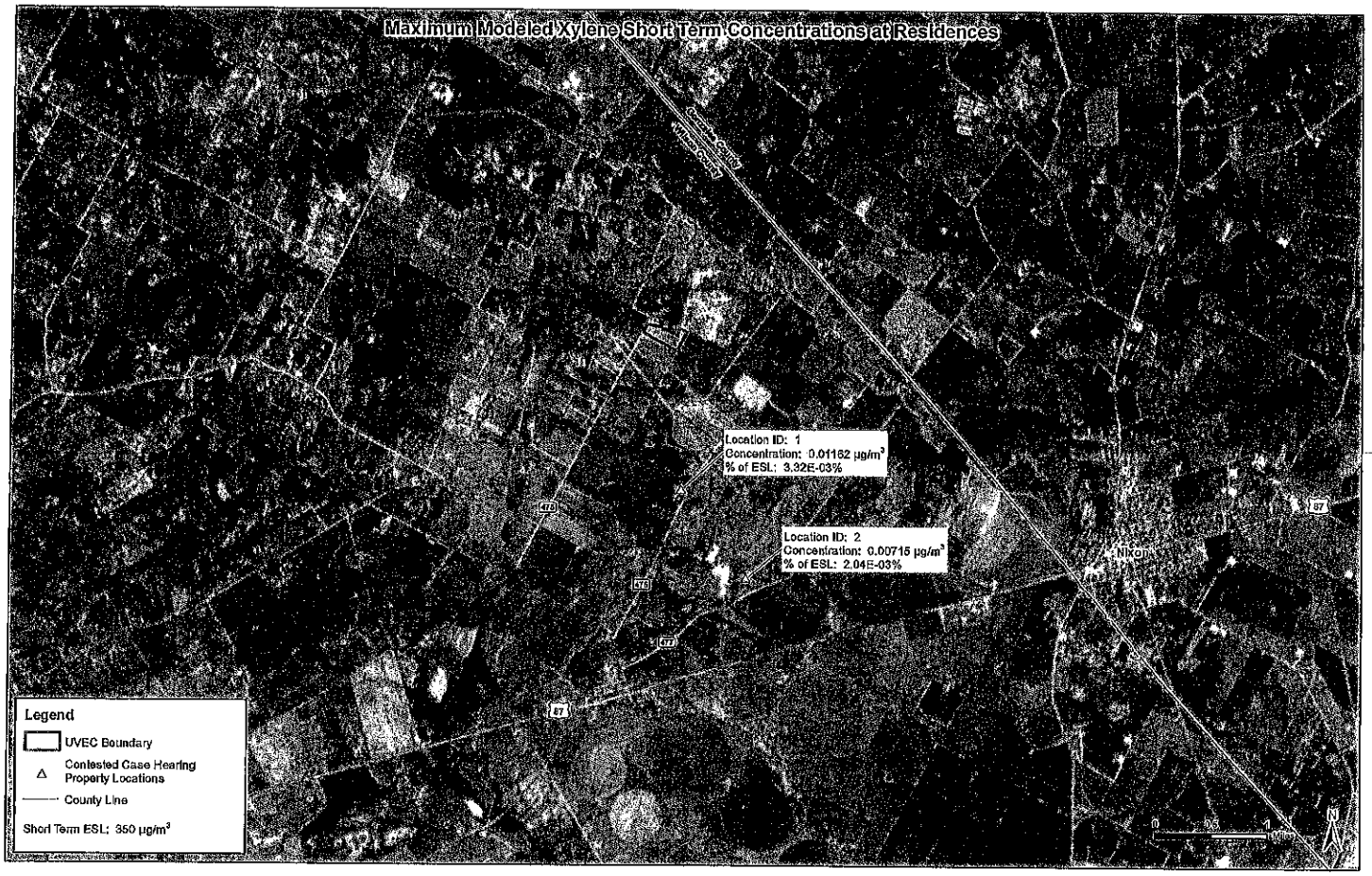

Maximum Modeled Propylene Oxide Long Term Concentrations at Residences
Location ID: 1
Concentration: 0.00003 µg/m³
% of ESL: 4.28E-04%
Location ID: 2
Concentration: 0.00001 µg/m³
% of ESL: 1.43E-04%
Nixon
Legend
UVEC Boundary
Contested Case Hearing Property Locations
County Line
Long Term ESL: 7 µg/m³
N


Maximum Modeled Propylene Oxide Short-Term Concentrations at Residences
Location ID: 1
Concentration: 0.02112 µg/m³
% of ESL: 3.02E-02%
Location ID: 2
Concentration: 0.01792 µg/m³
% of ESL: 2.56E-02%
Nixon
Legend
UVEC Boundary
Contested Case Hearing Property Locations
County Line
Short Term ESL: 70 µg/m³
N


Maximum Modeled Toluene Long Term Concentrations at Residences
Location ID: 1
Concentration: 0.00009 µg/m³
% of ESL: 7.50E-06%
Location ID: 2
Concentration: 0.00004 µg/m³
% of ESL: 3.33E-06%
Legend
UVEC Boundary
Contested Case Hearing Property Locations
County Line
Long Term ESL: 1,200 µg/m³
Nixon
87
N


Maximum Modeled Toluene Short Term Concentrations at Residences
Location ID: 1
Concentration: 0.02350 µg/m³
% of ESL: 6.71E-04%
Location ID: 2
Concentration: 0.01443 µg/m³
% of ESL: 4.12E-04%
Legend
UVEC Boundary
Contested Case Hearing Property Locations
County Line
Short Term ESL: 3,500 µg/m³
0
0.5
1
Miles


Maximum Modeled Xylene Long Term Concentrations at Residences
Location ID: 1
Concentration: 0.00004 µg/m³
% of ESL: 2.22E-05%
Location ID: 2
Concentration: 0.00002 µg/m³
% of ESL: 1.11E-05%
Legend
UVEC Boundary
Contested Case Hearing Property Locations
County Line
Long Term ESL: 180 µg/m³
Nixon
87
N


Maximum Modeled Xylene Short Term Concentrations at Residences
Location ID: 1
Concentration: 0.01182 µg/m³
% of ESL: 3.32E-03%
Location ID: 2
Concentration: 0.00715 µg/m³
% of ESL: 2.04E-03%
Nixon
Legend
UVEC Boundary
Contested Case Hearing Property Locations
County Line
Short Term ESL: 350 µg/m³
0
1
N

ATTACHMENT B

TCEQ DOCKET NO. 2015-1170-AIR

APPLICATION BY NAVASOTA SOUTH PEAKERS OPERATING COMPANY I, L.L.C. FOR TCEQ AIR QUALITY PERMIT NUMBER 120973 and PSD-TX-1420	§	**BEFORE THE TEXAS COMMISSION ON ENVIRONMENTAL QUALITY**

AFFIDAVIT OF DR. THOMAS DYDEK, PhD, DABT, PE

State of Texas §
County of Travis §

Before me, the undersigned Notary Public in and for Travis County Texas, personally appeared THOMAS DYDEK, Ph.D., D.A.B.T., P.E., the affiant, whose identity is known to me. After I administered an oath, affiant testified as follows:

1. I am a Board Certified Toxicologist as a Diplomat of the American Board of Toxicology (D.A.B.T.) and a Licensed Professional Engineer (P.E.). I have over 30 years of continuous experience in the environmental field as a toxicologist focusing on human health risk assessments and evaluations of the potential for adverse public health effects of exposure to air contaminants. I have a Bachelor's Degree in Mechanical Engineering and a Master's Degree in Environmental Science and Engineering from Rice University in Houston, Texas. My doctoral degree is in Environmental Science and Engineering from the University of North Carolina School of Public Health. I have also done a Post-Doctoral Fellowship in Toxicology in the College of Pharmacy at the University of Texas at Austin.

2. Board certification in toxicology is similar to that in medical fields. The American Board of Toxicology is the organization that conducts board certification activities for toxicology in this country. Candidates for certification must demonstrate a high level of education and a sufficient number of years in professional practice to qualify to sit for the Board Certification examination. The examination is a two-day written test that covers all aspects of toxicology. If that examination is passed, the candidate becomes a Diplomate of the American Board of Toxicology, or D.A.B.T. for short. To keep one's certification current, it must be renewed every five years. I became Board-Certified in 1995 and I have been re-certified in 2000, 2005, 2010, and 2015. I became a Licensed Professional Engineer in Texas in 1992 and I have kept my P.E. license current since that time.

3. My chief area of expertise is the evaluation of human health and welfare effects of exposure to environmental pollution. While with the U.S. Fish and Wildlife Service in Albuquerque, New Mexico, I was responsible for control of air, water, and solid waste pollution at agency facilities in an eight-state area. I also worked for the U.S. Environmental Protection Agency in Dallas, Texas as a permit engineer in the National Pollutant Discharge Elimination System (NPDES) program. During my doctoral program, I worked for the EPA in North Carolina in the area of air

11. There are two major categories of air contaminants of concern in this type of health effects evaluation process: criteria air pollutants and non-criteria air pollutants. Criteria air contaminants are those for which a National Ambient Air Quality Standard (NAAQS) or a Texas Commission on Environmental Quality (TCEQ) Property Line or "Net Ground Level Concentration" (NGLC) Standard has been set.

12. The Primary NAAQSs and the health-based State of Texas NGLC standards have been set at levels protective of the health of even the most sensitive members of the general population with an adequate margin of safety. Sensitive members of the population include the very young, the very old, and people with pre-existing medical conditions such as asthma and other respiratory diseases and diseases of the cardiovascular system.

13. Secondary NAAQSs and State of Texas NGLC standards exist to protect against adverse effects on welfare. These standards are set to provide protection against decreased visibility and damage to wildlife, domestic animals, crops, vegetation, and buildings and other property.

14. Non-criteria air pollutants are those that have neither a NAAQS nor a State of Texas standard. While there are no air quality standards for these air contaminants, the TCEQ has established guideline exposure levels which are used to evaluate the potential for adverse health or welfare effects of community exposures to these air contaminants. Non-criteria air contaminants include, but are not limited to, those recognized as Hazardous Air Pollutants (HAPS) by the U.S. Environmental Protection Agency. These guideline levels are called Effects Screening Levels (ESLs). ESLs have been set at levels at or below which no adverse human health or welfare effects are expected.

15. Health-based ESLs have been set based on human or animal data that show the levels of chemical exposures at which no adverse effects (what's called a no adverse effects level or NOAEL) or very minor adverse effects (a low adverse effects level or LOAEL) occur. These NOAELs or LOAELs are then reduced by safety factors designed to make the data applicable to community exposures to air contaminants. ESLs are very conservative because they have been set at levels typically orders of magnitude smaller than exposure levels that can actually cause adverse health effects.

16. Welfare-based ESLs are based on prevention of odor nuisance and effects on vegetation. Most welfare-based ESLs have been set to prevent odor nuisances. These ESLs are set at the odor thresholds for chemicals as determined in a laboratory setting. These ESLs are very conservative as well, since the levels at which odors can be detected in the laboratory will be lower than those likely to be detected in a community setting. There are only a few vegetation-based ESLs (for hydrogen fluoride, other fluorides, and ethylene). These ESLs have been set at levels at which minor damage to plant species has been found.

17. The proposed Navasota plant will emit five air contaminants that have NAAQSs: carbon monoxide, nitrogen dioxide, sulfur dioxide, particulate matter less than 10 microns in diameter (PM_{10}), and particulate matter less than 2.5 microns in diameter ($PM_{2.5}$). The proposed Plant will also emit two air contaminants that have State of Texas standards: sulfur dioxide and sulfuric

24. It is also a common and accepted practice to rely on the results of such modeling when performing human health effects evaluations for chemicals without Federal or State of Texas standards. To analyze potential impacts at individual Hearing Requestor's (Talley and Werley) residences, receptors were located at the location of each residence and the predicted values of air contaminants were determined by the air dispersion model. The Talley residence is located approximately 1.40 miles southeast of the emissions sources at the proposed Navasota site. The Werley residence is approximately 2.32 miles east-southeast from the emission sources.

25. The airborne concentrations predicted by the Applicant's air dispersion modeling are conservative; that is, they likely over-predict the levels of air contaminants that could actually occur in the vicinity of the proposed Navasota Plant and/or at the residences of the Hearing Requestors. For example, it was assumed that the maximum emissions would occur during the hours in which meteorological conditions least favor the dispersion of those air contaminants.

26. In this Affidavit, I will list and discuss the maximum predicted impacts at the Hearing Requestors residences to determine the potential health risks at those locations. According to the Permit Application for this project, there are no other sensitive receptors (school, churches, day care facilities, etc.) within 3,000 feet of the proposed plant.

27. Table 1 at the end of this Affidavit summarizes the maximum predicted impacts resulting from the emissions of air contaminants having NAAQSs at the residential receptor having the higher impacts. These maximum impacts ranged from 0.015% to 3.51% of the applicable standards. Another way to express this is that the predicted impacts were from 28 to more than 6,600 times lower than the applicable NAAQSs. Since these data pertain to the residential receptor having the greatest predicted impact, the impacts at the other residence would be even smaller percentages of the NAAQSs.

28. Since all of the secondary (welfare-based) NAAQSs are either equal to or greater than the primary NAAQSs, a demonstration that the emissions will not exceed the primary NAAQSs insures that no adverse effects on visibility, wildlife, domestic animals, crops, vegetation, or buildings and other property will occur.

29. Table 2 shows the maximum predicted impacts of air contaminants to be emitted having State of Texas NGLC standards at the residential receptor having the greater impacts. Those impacts ranged from 0.024% to 0.20% of the State of Texas Property Line Standards. In other words, these impacts were from 500 to more than 4,000 times lower than those standards.

30. Table 3 shows the maximum predicted impacts at the highest-impacted residential receptor for chemicals to be emitted having ESLs. These impacts ranged from 0.0000025% to 0.362% of the respective ESLs for those chemicals. Put another way, the highest impacts at these sites were from 276 to greater than 13 million times lower than the applicable ESLs.

Table 1. Emissions Impact Analysis for Air Contaminants Having NAAQSs (at the Requestor's residence having the highest predicted impact)

Air Contaminant	Averaging Time	Maximum Impact ($\mu g/m^3$)	NAAQS for Air Contaminant ($\mu g/m^3$)	Maximum Impact (%NAAQS)
carbon monoxide	1-hr	23.06	40,000	0.058%
carbon monoxide	8-hr	15.42	10,000	0.015%
nitrogen dioxide	1-hr	6.60	188	3.51%
nitrogen dioxide	Annual	0.025	100	0.025%
PM10	24-hr	0.28	150	0.19%
PM2.5	24-hr	0.17	35	0.48%
PM2.5	Annual	0.0032	12	0.03%
sulfur dioxide	1-hr	0.25	196	0.13%
sulfur dioxide	3-hr	0.24	1,300	0.02%

Table 2. Emissions Impact Analysis for Air Contaminants Having State of Texas Standards (at the Requestor's residence having the highest predicted impact)

Air Contaminant	Averaging Time	Maximum Predicted Impact ($\mu g/m^3$)	NGLC for Air Contaminant ($\mu g/m^3$)	Maximum Impact (% of NGLC)
sulfur dioxide	30-min	0.25	1,048	0.024%
sulfuric acid	1-hr	0.1*	50	0.20%
sulfuric acid	24-hr	0.01*	15	0.067%

* Sulfuric acid impacts shown are the maximum anywhere off-property. The predicted impacts at the Hearing Requestors' residences would be less than these amounts.

EXHIBIT A.

Current curriculum vitae for Dr. Thomas Dydek

CURRICULUM VITAE
Dr. Thomas Dydek, Ph.D., D.A.B.T., P.E.
Board-Certified Toxicologist and Professional Engineer

Dydek Toxicology Consulting
5208 Avenue H
Austin, Texas 78751

Phone: (512) 280-5477
Mobile: (512) 663-7836

E-mail: dydek@tox-expert.com
Web Page: http://www.tox-expert.com

I. AREAS OF EXPERTISE:

Evaluating the potential human health effects associated with exposure to toxic chemicals such as metals, gases, pesticides, petroleum products, oil and gas fracking emissions, solvents, and many other chemicals in occupational and community settings.

Evaluating the potential for odor nuisance conditions caused by airborne emissions of industrial chemicals such as those listed above.

Evaluating the potential for adverse health effects of implanted medical devices.

Preparing Baseline Risk Assessments, establishing clean-up guidelines or standards, conducting state of the art reviews, and doing chemical exposure assessments.

Investigating indoor air quality including projects involving exposure to molds and/or bacteria, and

Functioning as an expert witness in toxic tort cases, criminal proceedings, worker's compensation matters, and administrative hearings before environmental agencies.

II. EDUCATION:

A. Rice University, Houston, Texas. Bachelor of Arts degree in Mechanical Engineering. Major subjects were engineering, chemistry, physics, and mathematics.

B. Rice University, Houston, Texas. Master of Science degree in Environmental Science and Engineering. Major subjects were water and wastewater engineering and biology.

C. University of North Carolina School of Public Health. Doctorate in Environmental Science and Engineering, majoring in toxicology and minoring in epidemiology and biostatistics. Other major subjects were air pollution engineering and chemistry, aerosol science, biochemistry, and industrial hygiene.

D. University of Texas at Austin. Post-doctoral research fellowship in toxicology in the UT School of Pharmacy. Chief area of research was the effects of drugs and environmental contaminants on the respiratory systems of experimental animals.

III. WORK EXPERIENCE:

A. Dydek Toxicology Consulting, Austin, Texas. Dr. Dydek operates his own environmental consulting firm that specializes in toxicology and human health risk assessment. His work includes health risk analyses for site remediations, health effects evaluations for air and hazardous waste permitting, and other toxicological evaluations. He is very familiar with the State of Texas and the U.S. Environmental Protection Agency quantitative risk assessment methodologies and with other methods for assessing the potential for adverse effects from exposure to environmental contaminants. Dr. Dydek also serves as an expert witness in toxic tort cases, regulatory agency public hearings, and other legal proceedings.

B. Jones and Neuse, Inc., Austin, Texas. Dr. Dydek was employed as Senior Toxicologist and Project Engineer for this environmental consulting firm for three and one-half years. This job entailed health risk assessments, air emissions calculations, writing proposals, doing cost estimates and other functions associated with assisting clients in obtaining necessary permits and other authorizations to operate within the existing framework of environmental regulations in this country and abroad. This included work on Superfund and other remediation activities using the Risk Reduction Rules, air quality permitting, Resource and Recovery Act (RCRA) activities, preparing No-Migration Petitions, and expert testimony in public hearings as well as toxic tort and other legal cases.

C. Private Environmental Consulting Work, Austin, Texas. Dr. Dydek worked on several human health risk analysis projects on his own time while at the Texas Air Control Board. These included two reports on the potential human health effects of exposures to ambient levels of air pollutants in the Mexico City area, and an analysis of sulfur dioxide levels in an industrial area in Hong Kong.

D. Texas Air Control Board, Austin, Texas. Dr. Dydek was employed as the Senior Staff Toxicologist in the Health Effects Division. His major duty in this job was to assess the potential for adverse public health and welfare effects from emissions of air pollutants. He conducted extensive independent evaluations of the impacts of potentially-toxic air contaminants on human health and welfare. He participated in public meetings and testified as an expert witness in public hearings concerning air pollution hazards. He also monitored the scientific literature, attended workshops and conferences, and kept the health effects computerized databases current.

E. Saint Edward's University, Austin, Texas. Dr. Dydek taught several undergraduate courses in the Environmental Studies Program in the Department of Physical and Biological Sciences. These courses included Environmental Studies, Toxicology, Industrial Hygiene, and Urban Planning.

F. U.S. Environmental Protection Agency, Research Triangle Park, North Carolina. Dr. Dydek worked as a research scientist in the planning, implementation, and evaluation of air pollution control research projects, either as principal investigator or as project officer.

G. U.S. Environmental Protection Agency, Research Triangle Park, North Carolina. Dr. Dydek held several 20-hour per week appointments in various EPA research laboratories during doctoral program at the University of North Carolina School of Public Health. This work was in the areas of air quality data analysis and in human health effects of exposures to air pollutants at the EPA Human Exposures Laboratory.

H. U.S. Environmental Protection Agency, Dallas, Texas. Dr. Dydek worked as an environmental engineer in the area of water pollution control, writing water pollution (National Pollutant Discharge Elimination System) permits and compliance schedules for major industrial and Federal facilities.

I. U.S. Fish and Wildlife Service, Albuquerque, New Mexico. Dr. Dydek was in charge of planning, designing, and inspecting facilities for water supply, wastewater pollution control, and solid waste management at Federal hatcheries and refuges in an eight-state area.

IV. CERTIFICATIONS, LICENSES, AFFILIATIONS, AND PROFESSIONAL ACTIVITIES:

A. Board Certified Toxicologist as a Diplomate of the American Board of Toxicology (D.A.B.T.).

B. Licensed and authorized to practice as a Professional Engineer in Texas (License No. 71831).

C. Adjunct Professor of Environmental Health at the University of Texas School of Public Health at San Antonio, Texas.

CERTIFICATIONS, LICENSES, AFFILIATIONS, AND PROFESSIONAL ACTIVITIES (continued):

D. Member of the Society of Toxicology, the American College of Toxicology, the Society for Risk Analysis, the Roundtable of Toxicology Consultants, the American Conference of Governmental Industrial Hygienists, and the Air and Waste Management Association (Vice-Chair of the Air Toxics Committee, International AWMA; Treasurer of Central Texas Chapter of AWMA; Membership Chair of Central Texas AWMA).

E. Professional Activities at Local Level: Member of the Citizen's Advisory Task Force on Solid Waste Management. Member of an ad hoc committee on air quality issues in Austin. Member of a steering committee which aided the City in working with the local mass transit authority (Capital Metro) on environmental compliance.

F. Professional Activities at State Level: Member of the Human Health Workgroup in the State of Texas Environmental Priorities Project (STEPP). This was the comparative risk project for Texas. Also provided comments for Sunset Review of Texas Natural Resource Conservation Commission.

G. Technical Advisor for television shows "CSI: Las Vegas", and "Bones" (2009 to present).

H. Peer-reviewer for U.S. Environmental Protection Agency "Provisional Toxicity Value" documents (2011 to present).

V. HONORS AND AWARDS:

Dean's List, Rice University.
Special Achievement Award, U.S. Fish and Wildlife Service, Albuquerque, New Mexico.
Special Achievement Award, U.S. Environmental Protection Agency, Dallas, Texas.
Certificate of Appreciation, City of Austin (for work on the Solid Waste Management Task Force).
Outstanding Employee Award, Texas Air Control Board, Austin, Texas.
Austin City Council Award (for work on Clean Air committee).

VI. PERSONAL ACCOMPLISHMENTS

Member, National Championship Soccer Team (Veteran's Cup, Over 50's Division), 2000.
Member, National Championship Soccer Team (Veteran's Cup, Over 60's Division), 2007, 2008, 2009, 2010.
Member of Austin City League Championship Soccer Team (Over 50's Division), 2007, 2010, and 2011.

VII. PUBLICATIONS:

"Spring Creek: Water Resource Planning for Local Development" Dydek, T., et al., Environmental Sciences and Engineering Report No. 1, Rice University, Houston, Texas, 1971.
"Effects of Chlorination on Bacterial Polysaccharide Material", Master's Thesis, Rice University, 1972.
"The Influence of Carbon-Nitrogen Ratio on the Chlorination of Microbial Aggregates", W.G. Characklis and S.T. Dydek, Water Research 10:515-522, 1976.
"Neutralization and Size Changes of Sulfuric Acid Mist Particles", Ph.D. Dissertation, University of North Carolina School of Public Health, 1981.
"Analysis of Pulmonary Collagen Production by HPLC Separation of Radiolabled Hydroxyproline and Proline", Proceedings of the Western Pharmacology Society 27:319, 1984.
"Effects of Sodium Chloride on the HPLC Separation of Hydroxyproline and Proline", Liquid Chromatography 2:536, 1984.
"Effects Evaluation of Accidental Releases of Air Toxics: A Case Study of a Vinyl Chloride/Hydrogen Chloride Release", in Toxics, CAER, and Title III, Proceedings of the APCA Southwest Section Technical Meeting, ed. J. Shields, Corpus Christi, Texas, 1988.

VII. PUBLICATIONS (continued):

"Use of Odor Thresholds for Predicting Off-Property Odor Impacts", Willhite, M.T. and S.T. Dydek, in Recent Developments and Current Practices in Odor Regulations, Controls and Technology, International Specialty Conference, Detroit, Michigan, Derenzo, D.R. and A. Gnyp, eds., Air & Waste Management Association, Pittsburgh, Pennsylvania, 1989, pp. 235-245.

"TNRCC's New Approach to Air Quality Permits", Texas Lawyer Environmental Law Issue, pp. 30-34, 1995.

"Health Risk Analysis Methods and the Law", The Texas Law Reporter, Volume 2, Issue 7, 1996.

"A Review of 'Microbial Toxins. Molecular and Cellular Biology'", International Journal of Toxicology 25:433-434, 2006.

"Investigating Carbon Monoxide Poisonings", book chapter in Carbon Monoxide Poisonings, 3rd Edition, D. Penney, ed., CRC Press, Taylor & Francis Group, Boca Raton, Florida, 2008.

"Shale Oil Toxicity", book chapter in the Encyclopedia of Toxicology, 3rd Edition, Elsevier Publishing Company, Waltham, Massachusetts, 2014.

VIII. TECHNICAL AND BUSINESS RELATED PRESENTATIONS:

"Effects of Dynamic Operating Parameters on the Calibration Stability of CHAMP Aerometric Sensors", Air Pollution Control Association Annual Meeting, Toronto, Canada (1977).

"Neutralization and Size Changes of Sulfuric Acid Mist Particles in a Model of the Human Upper Airways", American Association for Aerosol Research Annual Meeting; Santa Monica, California (1982).

"Studies of the Behavior of Sulfuric Acid Mist in a Model of the Human Upper Airways", Sixth World Congress on Air Quality, Paris, France (1983).

"Human Exposure to Potentially-Toxic Elements Through Ambient Air in Texas", Air Pollution Control Association Annual Meeting; San Francisco, California (1984).

"Ozone Health Effects", Ozone-Its Environmental and Economic Impact on Southeast Texas; Environmental Quality Council of Southeast Texas; Beaumont, Texas (1984).

"Risk Assessment in Health Effects Review of Air Permits in Texas", Air Pollution Control Association Annual Meeting; Detroit, Michigan (1985).

"Effects Evaluation of Non-Criteria Air Pollutant Emissions from Hazardous Waste Management Facilities in Texas", Control of Air Pollution from Hazardous/Solid Waste Management Facilities; Austin, Texas (1986).

"Texas Procedure for Assessing Air Toxics", Setting Air Toxics Standards; Society for Risk Analysis; Houston, Texas (1987).

"Texas Experience in Hazard, Exposure, and Risk Assessment Methods", Developing and Implementing Air Toxics Control Programs; USEPA; Boston, Massachusetts (1987).

"Texas Procedure for Assessing Air Toxics", Solid and Hazardous Waste Management Symposium; Texas Water Pollution Control Association; Houston, Texas (1987).

"Effects Evaluation of Hazardous Waste Handling Facilities", Annual Technical Meeting of the Southwest Section of the Air Pollution Control Association; Irving, Texas (1987).

"Air Toxics Regulation- Federal and State"; Meeting of the North Texas Chapter of the Air Pollution Control Association; Dallas, Texas (1987).

"Effects Evaluation of Accidental Releases or Air Toxics: A Case Study of a Vinyl Chloride Release", Southwest Section of the APCA Annual Meeting; Corpus Christi, Texas (1988).

"Risk Communication in Air Permitting in Texas" APCA Annual Meeting; Dallas, Texas (1988).

"Air Toxics", Texas Environmental Super Conference; Austin, Texas (1988).

"Update on the Gulf Coast Community Exposure Study", Community Leader/News Media Briefing; Port Arthur, Texas (1988).

"Air Toxics Review", Air Quality Permits Workshop, Texas Air Control Board, Austin, Texas (1988).

"Comparison of Health Risk Assessment Approaches for Carcinogenic Air Pollutants", APCA; Anaheim, California (1989) and Haztech International Conference; Houston, Texas (1990).

"Texas Air Control Board Programs Concerning Air Toxics", North Texas Council of Governments, Dallas, Texas (1989).

"Essentials of Qualitative Risk Assessment", Solid and Hazardous Waste Management Conference, Lafayette, Louisiana (1993).

VIII. TECHNICAL AND BUSINESS RELATED PRESENTATIONS (continued):

"Epidemiology: The Discipline and Its Uses", Sixth Annual Environmental Law Symposium, South Texas College of Law, Houston, Texas (1995).
"Introduction to Risk Assessment and Risk Reduction", Alamo Chapter of the Air and Waste Management Association San Antonio, Texas (1995).
"Toxicology, Epidemiology and Risk Assessment in Environmental Programs", Ninth Annual Texas Environmental Superconference, Austin, Texas (1997).
"Overview of Environmental Risk Assessment Programs", Southwestern Association of Toxicologists, Spring Technical Meeting, Fort Worth, Texas (1998).
"Quantitative Risk Assessment and its Applicability to Industrial Hygiene", American Industrial Hygiene Association Local Chapter meeting, Austin, Texas (1999).
"Adventures of an Expert Witness Toxicologist", Air & Waste Management Association annual meeting, Salt Lake City, Utah (2000).
"So You Want to be a Toxicology Consultant", American College of Toxicology annual meeting, San Diego, California (2000).
"Working with an Expert Witness", Texas Environmental Superconference, Austin, Texas (2005).
"Toxicology in the Media", Society of Environmental Journalists Annual Meeting, Austin, Texas (2005).
"The Toxicologist as an Expert Witness", Roundtable of Toxicology Consultants Mid-Year Meeting, Tucson, Arizona (2008).
"Toxicology Consulting for the Chemical Industry", Continuing Education Course at the American College of Toxicology Annual Meeting, Palm Springs, California (2009).

IX. CONFERENCES, SEMINARS, COURSES, AND WORKSHOPS ATTENDED:

"Environmental Law" (1972).
"New Horizons in Environmental Biology" (1973).
"Air Pollution and Public Health", University of Texas at Dallas course (Fall, 1975).
"Environmental Medicine", Southwestern Medical School course (1975).
"Introduction to Epidemiology", Southwestern Medical School course (1976).
"Principles and Practice of Air Pollution Control" (1976).
Science Seminar, National Institute of Environmental Health Sciences (1977).
* American Association for Aerosol Research Annual Meeting (1982).
"Hazardous Waste Management", University of Texas at Austin course (Fall, 1982).
* "World Congress on Air Quality" (1983).
"Structure-Activity Relationships and Toxicity Assessment" (1984).
"The Occupational Health and Safety Professional in the Legal Environment", Southwest Occupational Health Services (1984).
* Air Pollution Control Association Annual Meeting (1984).
"Update on Cancer in the Deep South", Deep South Section of the American Industrial Hygiene Association (1984).
"Evaluation of the Scientific Basis for the Ozone/Oxidant Standard", Air Pollution Control Association (1984).
* "Ozone-Its Environmental and Economic Impact on Southeast Texas", Environmental Quality Council of Southeast Texas (1984).
Society of Toxicology Annual Meeting (1985).
* Air Pollution Control Association Annual Meeting (1985).
"National Air Toxics Information Clearinghouse Database Seminar", U.S. Environmental Protection Agency (1985).
"Air Toxics Control: Clearing the Air", State and Territorial Air Pollution Program Administrators and the Association of Local Air Pollution Control Officials (1985).
"First National Regulatory Agency Resource Recovery Workshop", Northeast States for Coordinated Air Use Management and California Air Pollution Control Officers Association (1986).

* Dr. Dydek gave a presentation at this meeting or conference

IX. CONFERENCES, SEMINARS, COURSES, AND WORKSHOPS ATTENDED (continued):

American Public Health Association Annual Meeting (1986).
"Energy from Municipal Waste: Opportunities for the Southwest", U.S. Department of Energy (1986).
** State of New Mexico Environmental Improvement Board Hearings concerning an air toxics program for New Mexico (1986).
* "Setting Air Toxics Standards", Lone Star Chapter of the Society for Risk Analysis (1987).
"Drug Metabolism and Toxicokinetics", Continuing Education Course, Society of Toxicology (1987).
Society of Toxicology Annual Meeting (1987).
* "Developing and Implementing Air Toxics Control Programs", State and Territorial Air Pollution Program Administrators and the Association of Local Air Pollution Control Officials (1987).
* "Solid and Hazardous Waste Management Symposium" (1987).
* Annual Technical Meeting, Southwest Section of the Air Pollution Control Association (1987).
* "Air Toxics Regulation- Federal and State", North Texas Chapter of the Air & Waste Management Association (1987).
American Public Health Association Annual Meeting (1987).
Society for Risk Analysis Annual Meeting (1987).
"Respiratory Tract Toxicology", Continuing Education Course, Society of Toxicology (1988).
Society of Toxicology Annual Meeting (1988).
* Southwest Section of the Air Pollution Control Association Annual Meeting (1988).
"Environmental Health Faculty/Employer Forum", Association of Schools of Public Health (1988).
"Hospital Infectious Waste Incineration and Hospital Sterilization Workshop", State and Territorial Air Pollution Program Administrators and the Association of Local Air Pollution Control Officials (1988).
* Air Pollution Control Association Annual Meeting (1988).
* "Air Quality Permits Workshop@, Texas Air Control Board (1988).
"Regional Risk Assessment Workshop", U.S. Environmental Protection Agency (1988).
* "Texas Environmental Superconference", State Bar of Texas and the Southwest Section of the Air & Waste Management Association (1988).
* "Community Leader/News Media Briefing", Joint Industry Council of South Jefferson County (1988).
"Annual Conference on Occupational Health", American Academy of Occupational Medicine (1988).
"Benzene and Leukemia", Lone Star Chapter of the Society for Risk Analysis (1989).
"Regulatory Toxicology", Continuing Education Course, Society of Toxicology (1989).
Society of Toxicology Annual Meeting (1989).
* North Texas Council of Governments (1989).
Southwest Section of the Air Pollution Control Association Annual Meeting (1989).
* Air Pollution Control Association Annual Meeting (1989).
* "Haztech International Conference" (1990).
Air & Waste Management Association Annual Meeting (1990).
"Practical Strategies for Managing Environmental Liabilities" (1993).
* Solid and Hazardous Waste Management Conference, University of Southwest Louisiana and the Louisiana Department of Environmental Quality (1993).
Society of Toxicology Annual Meeting (1994).
Texas Natural Resource Conservation Commission Environmental Trade Fair (1994).
Air Quality Operating Permits Seminar, Texas Natural Resource Conservation Commission (1995).
* Sixth Annual Environmental Law Symposium, South Texas College of Law (1995).
* Lone Star Chapter of the Air & Waste Management Association (1995).
** Environmental Business Development Conference, American Institute for Environmental Education (1995).

* Dr. Dydek gave a presentation at this meeting or conference.
** Dr. Dydek moderated a panel at this meeting or conference.
*** Dr. Dydek provided expert witness testimony at this hearing

IX. CONFERENCES, SEMINARS, COURSES, AND WORKSHOPS ATTENDED (continued):

* Alamo Chapter of the Air & Waste Management Association (1995).
"Advanced Topics in Pharmacokinetics", Continuing Education Course, Society of Toxicology (1996).
Mid-America Toxicology Course, University of Kansas Medical Center (1995).
Air & Waste Management Association Annual Meeting (1995).
Environmental Remediation Opportunities Conference, U.S. Department of the Air Force and the U.S. Small Business Administration (1995).
Texas Natural Resource Conservation Commission Environmental Trade Fair (1995).
Society of Toxicology Annual Meeting (1996).
Texas Natural Resource Conservation Commission Environmental Trade Fair (1996).
Fifth Annual National Expert Witness and Litigation Seminar, S.E.A.K., Inc. (1996).
Texas Environmental Superconference, State Bar of Texas and the Southwest Section of the Air & Waste Management Association (1996).
"Toxicology of Agents: Metals", Continuing Education Course, Society of Toxicology (1997).
Society of Toxicology Annual Meeting (1997).
Texas Natural Resource Conservation Commission Environmental Trade Fair (1997).
"Industrial Hygiene Calculations", Continuing Education Course, American Industrial Hygiene Association (1997).
American Industrial Hygiene Association Annual Meeting (1997).
"EPA's Planned Revisions to the Ozone and Particulate Matter National Ambient Air Quality Standards", Continuing Education Course, Air & Waste Management Association (1997).
Air & Waste Management Association Annual Meeting (1997).
* Texas Environmental Superconference, State Bar of Texas and the Southwest Section of the Air & Waste Management Association (1997).
"Improving the Practice of Risk Assessment", Society for Risk Analysis, Lone Star Chapter First Annual State Conference (1997).
* Southwestern Association of Toxicologists, Spring Technical Meeting (1998).
Texas Natural Resource Conservation Commission Environmental Trade Fair (1998).
Texas Environmental Superconference, State Bar of Texas and the Southwest Section of the Air & Waste Management Association (1998).
"Hot Air Topics" Conference, Gulf Coast Chapter of the Air & Waste Management Association (1998).
"New Endpoints in Risk Assessment", Lone Star Chapter of the Society for Risk Analysis (1998).
"Assessing and Managing Risks in a Democratic Society", Society for Risk Analysis Annual Meeting (1998).
Texas Natural Resource Conservation Commission Environmental Trade Fair (1999).
** Air & Waste Management Association Annual Meeting (1999).
Texas Environmental Superconference, State Bar of Texas and the Southwest Section of the Air & Waste Management Association (1999).
Roundtable of Toxicology Consultants Annual Meeting (1999).
"Hot Air Topics" Conference, Gulf Coast Chapter of the Air & Waste Management Association (1999).
* American Industrial Hygiene Association Hill Country Chapter meeting (1999).
Society for Risk Analysis, Lone Star Chapter Annual Meeting (1999).
Air & Waste Management Association National Conference on Ozone Action Programs (1999).
"The Role of Human Personal Exposure Assessment in Determining Health Impacts of Urban Air Toxics", National Urban Air Toxics Research Center (2000).
Society of Toxicology Annual Meeting (2000).
Texas Natural Resource Conservation Commission Environmental Trade Fair (2000).
* Air & Waste Management Association Annual Meeting (2000).
Texas Environmental Superconference, State Bar of Texas and the Southwest Section of the Air & Waste Management Association (2000).
Indoor Air Quality Association Annual Meeting (2000).

* Dr. Dydek gave a presentation at this meeting or conference.
** Dr. Dydek was co-chairman of a technical session at this meeting or conference.

IX. CONFERENCES, SEMINARS, COURSES, AND WORKSHOPS ATTENDED (continued):

Expert Witness Workshop (2000).
* American College of Toxicology Annual Meeting (2000).
American Industrial Hygiene Association Symposium, "Molds in the Indoor Environment" (2000).
Air & Waste Management Association Annual Meeting (2001).
Texas Environmental Superconference, State Bar of Texas and the Southwest Section of the Air & Waste Management Association (2001).
Texas Natural Resource Conservation Commission Environmental Trade Fair (2002).
Texas Environmental Superconference, State Bar of Texas and the Southwest Section of the Air & Waste Management Association (2002).
Environmental Law Update Seminar, Fulbright & Jaworski (2002).
Society for Risk Analysis Annual Meeting (2002).
"Protecting the Central Texas Environment and Economy", Air and Waste Management Association, Central Texas Chapter (2004).
Texas Commission on Environmental Quality Environmental Trade Fair (2004).
American Bar Association Annual Meeting (as an exhibitor, 2004).
"Hot Air Topics" Conference, Gulf Coast Chapter of the Air & Waste Management Association (2004).
Environmental Law Update Seminar, Fulbright & Jaworski (2004).
Society of Toxicology Annual Meeting (2005).
Texas Commission on Environmental Quality Environmental Trade Fair (2005).
Texas Legislative Update Seminar (2005).
* Texas Environmental Superconference, State Bar of Texas and the Southwest Section of the Air & Waste Management Association (2005).
** Society of Environmental Journalists Annual Meeting (2005).
Society of Toxicology Annual Meeting (2006).
Texas Commission on Environmental Quality Environmental Trade Fair (2006).
Texas Environmental Superconference, State Bar of Texas and the Southwest Section of the Air & Waste Management Association (2006).
Society of Toxicology Annual Meeting (2007).
Texas Commission on Environmental Quality Environmental Trade Fair (2007).
Environmental Law Update Seminar, Fulbright & Jaworski (2007).
Legislative Update Seminar, Vinson & Elkins (2007)
Texas Environmental Superconference, State Bar of Texas and the Southwest Section of the Air & Waste Management Association (2007).
"Chemical Specific Adjustment Factors", continuing education course taken at the Society for Risk Analysis Annual Meeting (2007).
Society for Risk Analysis Annual Meeting (2007).
Society of Toxicology Annual Meeting (2008).
Texas Commission on Environmental Quality Environmental Trade Fair (2008).
Texas Environmental Superconference (2008).
**** Roundtable of Toxicology Consultants Annual Meeting (2008).
American College of Toxicology Annual Meeting (2008).
"New Frontiers in Metal Toxicology: Genetic Susceptibility, Early Diagnosis, and Related Biological Indices", Continuing Education Course, Society of Toxicology (2009).
Society of Toxicology Annual Meeting (2009).
Texas Commission on Environmental Quality Environmental Trade Fair (2009).
Roundtable of Toxicologists Mid-Winter Meeting (2009).
* American College of Toxicology Annual Meeting, Continuing Education Course (2009).

* Dr. Dydek gave a presentation at this meeting or conference.
** Dr. Dydek served on a panel at this meeting or conference.
*** Dr. Dydek chaired a session at this meeting or conference.

IX. CONFERENCES, SEMINARS, COURSES, AND WORKSHOPS ATTENDED (continued):

Society of Toxicology Annual Meeting (2010).
Alliance for Risk Assessment, "Beyond Science and Decisions: from Problem Formulation to Dose-Response. Workshop Number 1" (2010).
Air and Waste Management Association Environmental Law Symposium (2010).
Texas Commission on Environmental Quality Environmental Trade Fair (2010).
National Urban Air Toxics Research Center "Air Toxics Symposium" (2010).
"Hot Air Topics" Conference, Gulf Coast Chapter of the Air & Waste Management Association (2011).
Society of Toxicology Annual Meeting (2011).
"Environmental Law Update Seminar", Fulbright & Jaworski (2011).
Society of Toxicology Annual Meeting (2012).
Texas Commission on Environmental Quality Environmental Trade Fair (2012).
"Beyond Science and Decisions" Webinar (2012).
Society of Toxicology Annual Meeting (2013).
Texas Commission on Environmental Quality Environmental Trade Fair (2013).
Roundtable of Toxicology Consultants Mid-year Meeting (2013).
"Independent Workshop on Ozone NAAQS: Science Policy" Webinar (2015).